

# **The 2001 New Jersey Middle School Substance Use Survey Report**

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**Research & Information Systems  
Division of Addiction Services**

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**The 2001 New Jersey Middle School  
Substance Use Survey Report**

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# Executive Summary

The *2001 New Jersey Middle School Survey* was conducted by the Department of Health and Senior Services, Division of Addiction Services between December 2000 and March 2001. A total of 16,002 valid surveys were collected from 7<sup>th</sup> and 8<sup>th</sup> grade public and private school students throughout the state. This is the third survey of New Jersey middle school students; the previous surveys were conducted in 1995 and 1999. There were two main objectives for the current survey. The first was to estimate the prevalence of alcohol, tobacco and other drugs (ATOD) among middle school students. The second, and equally important, objective of the survey was to identify risk and protective factors that correlate with ATOD use in order to effectively create prevention planning.

Twenty of the 21 New Jersey counties participated in the survey. A total of 261 schools were recruited to participate in the survey, of which 59 (22.6%) agreed to participate and later returned the survey.

## ***Demographics***

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The responding students were evenly split between 7<sup>th</sup> and 8<sup>th</sup> grade, and between males and females. Almost two-thirds of the students (62.9%) identified themselves as White, with nearly equal numbers of students identifying themselves as African American (9.1%), Latino (9.9%), or of multiple ethnic heritage (9.3%). These demographic characteristics are quite similar to those from the previous middle school survey conducted in 1999. In addition, about two-thirds of students (66.5%) came from two-parent families, 30.0% came from single-parent families, and the balance came from other family types or foster care.

## ***Alcohol, Tobacco and Other Drug Use***

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New Jersey middle school students showed low levels of use for several drugs, including alcohol, tobacco products, and marijuana. The findings in the 2001 survey show a continuing decline in levels of use compared to the two earlier (1995 and 1999) middle school surveys. The 2001 findings also show that New Jersey 8<sup>th</sup> grade students reported lower levels of use than 8<sup>th</sup> grade students from the 2000 *Monitoring the Future* survey.

### *Alcohol Use*

Alcohol was the most frequently used substance by New Jersey middle school students. For all students, 44.6% reported that they had used alcohol in their lifetime. This is a substantial decrease from the 1999 figure of 52.8%, and an even larger decrease from the 1995 figure of 57.0%. A similar pattern was observed for alcohol use in the past 30 days. The 2001 results show that 16.0% of New Jersey middle school students had used alcohol in the past 30 days, compared to the 1995 and 1999 figures of 30.0% and 24.6%, respectively. The prevalence rate for binge

drinking (defined as five or more drinks in a row in the past two weeks) was 7.6%. The 1999 figure was 9.7% (binge drinking was not measured in the 1995 survey).

### *Tobacco Use*

Tobacco use was measured for four separate products: cigarettes, smokeless tobacco, bidis (Indian cigarettes), and clove cigarettes. As with alcohol, prevalence rates for tobacco products declined from previous years. For example, in the 2001 survey, lifetime cigarette use was measured at 25.2%, and past 30-day use was measured at 7.2%. The equivalent figures for 1999 were 38.4% and 12.5%, respectively. Lifetime and 30-day prevalence of smokeless tobacco use was 4.5% and 2.3%, respectively, in the 2001 findings. This compares favorably to the respective numbers of 7.1% and 3.1% in the 1999 survey.

The use of bidis and clove cigarettes was measured for the first time in 2001. Results indicated that rates of use were low. Lifetime prevalence for bidis was measured at 2.8%, and lifetime prevalence for clove cigarettes was 2.3%.

### *Marijuana Use*

In 2001, 6.4% of the surveyed students had used marijuana in their lifetime. This was a substantial decline from the 1999 level of 11.8% and the 1995 level of 14.0%. A continued downward trend in past 30-day use was also observed, with 2.9% of students reporting use in 2001. This figure is also lower than *Monitoring the Future* 8<sup>th</sup> grade findings.

### *Inhalant Use*

Inhalant use was the exception to the overall pattern of continuing declines in drug use. In 2001, students reported a 9.1% lifetime prevalence rate for inhalant use, and a 4.9% and 2.9% rate for past year and past 30-day use, respectively. These figures represent little change from the 1995 and 1999 survey findings. New Jersey middle school students report lower levels of inhalant use when compared to *Monitoring the Future* results. In that survey, 8<sup>th</sup> graders reported a lifetime rate of 17.9% and a past 30-day prevalence of 4.5% compared to 9.4% and 2.7%, respectively, for New Jersey 8<sup>th</sup> graders.

### *Hallucinogens*

Very low prevalence rates were found for hallucinogens. Less than 1% of students reported that they had ever used hallucinogens or used them in the past 30 days. The lifetime prevalence rate for hallucinogens was measured at 2.0% in the 1999 survey.

## *Club Drugs*

In the 2001 survey, club drugs were defined as drugs like Ecstasy, GHB, Rohypnol<sup>®</sup>, ketamine or methamphetamine. While club drugs are gaining in popularity, reported use was low among New Jersey middle school students. In their lifetimes, only 2.4% of students reported that they had used club drugs compared to 0.9% for past 30-day use.

## *Cocaine and Heroin*

Very low percentages of students reported use of cocaine, crack cocaine, or heroin. The highest observed prevalence rate was 1.2% for lifetime cocaine or crack cocaine use. Similarly, low prevalence rates were also observed in the 1999 survey.

## *Other Drugs*

Students were asked if they had used “other illicit drugs” that were not mentioned in the survey. The 2001 lifetime prevalence rate was 3.1% for other unmentioned drugs, compared to 8.7% in 1999. The past 30-day figures were 1.1% and 4.3%, respectively. As with the specifically named drugs, fewer New Jersey students reported use.

The prevalence of “any illicit drug” use (defined as any drug use excluding alcohol and tobacco products) was calculated. Overall, 15.6% of New Jersey middle school students were found to have used at least one illicit drug in their lifetime, and 6.3% were found to have used at least one drug in the past 30 days. The lifetime results were lower than the 1999 findings of 20.7%, whereas the 30-day results were notably lower than the 1999 findings of 11.5%.

## ***Delinquent Behavior***

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The *2001 New Jersey Middle School Survey* also measured a series of eight other problem or antisocial behaviors—that is, behaviors that run counter to established norms of good behavior. Note that information on antisocial behavior is collected only for a prevalence period of the past 12 months prior to the survey date.

The most frequently reported behavior was “Getting Suspended” at 14.3% in 2001, compared to 12.0% in 1999. “Attacking Someone with Intent to Harm,” was next with 14.1% in 2001, compared to 13.8% in 1999. The other problem behaviors were reported by 4% or less of the sample and showed similarly minor fluctuations between 1999 and 2001. In general, there appears to be no appreciable change in delinquent behavior between 1999 and 2001.

## ***Special Topics***

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### *Peer-to-Peer Program Schools*

Students in schools where peer-to-peer (PTP) efforts have been launched appear to have only marginally lower ATOD use than students from other schools. Both the 1999 and 2001 surveys suggest that the difference in ATOD use between PTP and non-PTP school students is small.

### *Other Topics*

Analyses of ATOD use in relation to attitudes, past year's grades, and age of onset showed several interesting findings. In general, students with more negative attitudes towards drugs, those who have better academic performance, and those who started ATOD use later reported lower levels of ATOD use. These findings are consistent with other research reports and the analysis of related risk and protective factors.

## ***Risk and Protective Factors***

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New Jersey middle school students in 2001 reported lower levels of risk factors associated with family life, perceived risks of drug use and perceptions of use by peers compared to 1999. These and other risk and protective factors suggest that New Jersey middle school students have several strengths that can be utilized towards minimizing ATOD use.

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# The 2001 New Jersey Middle School Survey

This report describes findings from the *2001 New Jersey Middle School Survey* on substance use, administered to grades 7 and 8. The survey was conducted by the New Jersey Department of Health and Senior Services, Division of Addiction Services, by contracting with Developmental Research and Programs, Inc. (DRP), of Seattle, Washington. The survey data were collected from December 2000 through March 2001.

The *Communities That Care*<sup>®</sup> *Youth Survey* (CTCYS) served as the basis for the *2001 New Jersey Middle School Survey*. The CTCYS was developed to provide scientifically sound information to state-level and community-level prevention planners and policy makers. It assesses the current prevalence of problem behaviors related to alcohol, tobacco, and other drug (ATOD) use as well as delinquent behaviors in the surveyed population, and the degree to which risk and protective factors exist in the community, family, school, and individual-peer environments. This information is essential to support needs assessment, prevention planning, and intervention planning at the state and local levels. Risk and protective factors are characteristics of the community, family, school, and peer-individual environments, as well as individual characteristics of the students themselves, that are known to predict drug use, delinquency, and gang involvement (Hawkins, Catalano & Miller, 1992).

The *Communities That Care*<sup>®</sup> *Youth Survey* measures a total of eighteen risk factors and ten protective factors. Risk and protective factors are measured by a grouping of survey items called a scale (see Appendix F). Please note that five of the risk factors are measured with two scales. In addition to measuring risk and protective factors, the *Communities That Care*<sup>®</sup> *Youth Survey* assesses the current prevalence of problem behaviors in the community. The survey, its uses, and its ongoing development have been described in two recent articles (Pollard, Hawkins & Arthur, 1999; Arthur, Hawkins, Pollard, Catalano & Baglioni, 2001).

## ***The Survey Form***

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The *Communities That Care*<sup>®</sup> *Youth Survey* was developed from research (The Six-State Study) funded by the Center for Substance Abuse Prevention of the U.S. Department of Health and Human Services. The Six-State Study supported the development of a student survey to measure the following items:

- The prevalence and frequency of illicit drug use.
- The prevalence and frequency of antisocial behaviors.
- The degree to which risk and protective factors exist that can predict ATOD use, delinquency, gang involvement, and other problem behaviors in adolescents.

This survey instrument became the *Communities That Care*<sup>®</sup> *Youth Survey* (CTCYS). School survey data were collected in five states: Kansas, Maine, Oregon, South Carolina, and Washington. One other state, Utah, participated in the *Communities That Care*<sup>®</sup> project, but

school survey data collected in Utah were not collected in the same manner as in other states. Over 72,000 students participated in these statewide surveys, and analysis of the collected data contributed to the development of the final survey instrument.

The CTCYS was previously administered to New Jersey middle school students in May and June 1999. Detailed findings for that survey effort can be found in “The 1999 New Jersey Middle School Survey: A Statewide Report” (New Jersey Department of Health and Senior Services, 1999). Except for new survey questions on the prevalence of bidis, clove cigarettes, and club drug use, the present survey instrument remains largely unchanged since the 1999 survey. The 1999 survey was itself based on the 1995 survey instrument. Because of this, the present report includes both an analysis of current survey results as well as comparisons with both the 1995 and 1999 survey findings.

## ***Sampling Plan***

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The *2001 New Jersey Middle School Survey (2001 NJMSS)* was a self-administered, school-based survey of New Jersey public and private school students attending grades 7 and 8. Survey sampling procedures were the same as those used in the 1999 survey.

The *2001 NJMSS* used a cluster sample design to select schools within each of New Jersey’s 21 counties. All schools were selected with a probability of selection proportionate to the schools’ student enrollment within each county.

Both public and private schools that enrolled 7<sup>th</sup> and 8<sup>th</sup> grade students in each of New Jersey’s 21 counties were recruited to participate. New Jersey counties vary widely in population, and the number of students enrolled in middle schools ranges from a low of 1,527 in Salem County to a high of 19,166 in Bergen County. In the smallest counties, most schools were selected to complete the survey. In the largest counties, smaller samples of schools were selected to participate. The goal of the *2001 NJMSS* was to survey a sufficient number of students in each county to enable stable county-level estimates for 7<sup>th</sup> and 8<sup>th</sup> grade students. Sample size estimation was based on an acceptable confidence interval ( $\pm 4.0\%$ ) after both school non-response and student non-response were taken into account.

In each county, schools were selected until the total enrollment of selected schools met, or exceeded, the desired sample. All schools that were selected were identified as the *primary sample* in that county. These schools were the primary targets of recruitment. Concurrently with the selection of the *primary sample*, an additional number of schools were selected as a *secondary sample*. If a school that was identified as *primary* declined to participate, a school from the *secondary sample* was contacted, and recruited, for participation. The same methodology was used in selecting both the primary and secondary samples. The secondary sample was selected to assure an adequate sample size within each county while maintaining a level of randomness that helps ensure a statistically valid sample.

Note that results presented in this report, unless otherwise noted, are weighted based on county 7<sup>th</sup> and 8<sup>th</sup> grade enrollment figures. This was done to provide estimates generalizable to all public and private school students in the 7<sup>th</sup> and 8<sup>th</sup> grades in the state.

## ***Survey Administration***

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Data were collected between December 1, 2000, and March 31, 2001. Survey administration procedures were the same as those used in the 1999 survey, with all 7<sup>th</sup> and 8<sup>th</sup> grade students in the participating schools being invited to participate. Students had 50 minutes in which to complete the surveys. A standardized administration protocol was used in each school. Each teacher received an appropriate number of surveys and survey collection envelopes, reviewed the instructions with their students and asked the students to complete the survey. The instructions included such items as the concept that there were no right or wrong answers, the proper way to mark the answer boxes, and an explanation of the survey question formats.

A passive consent procedure was used for this survey administration, in which students were given the consent notification and were asked to give it to their parents. It was then left to the parents to notify the school if they did not want their child to participate in the survey.

To insure student confidentiality and absence of coercion, students were told that they could skip any question that they were not comfortable answering. Additionally, both the teacher and the written instructions on the front of the survey form assured students that the survey was anonymous and confidential.

There were no known irregularities in survey administration. All aspects of the survey protocol appeared to be appropriately implemented, including all protections of student confidentiality.

Students from a total of 59 New Jersey middle schools participated in the survey. Across all counties (except Bergen, which did not participate), anywhere from 1 to 6 middle schools (average = 2.95) participated in the survey.

A total of 16,787 non-blank survey forms were returned for processing (see Table 1). A total of 38 forms were removed from the data set because the students did not provide valid answers to at least 20% of the survey items. These forms are regarded as indicating a decision by the student to withdraw from participation in the survey. Therefore, all data from these forms were discarded.

## ***Survey Validation***

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Three strategies were used to assess the validity of the surveys that were returned. The first two strategies eliminated students who appeared to exaggerate their illicit drug use. The third strategy identified students who repeatedly reported logically inconsistent patterns of illicit drug use.

- In the first strategy, surveys from students who reported the highest possible levels of use for every illicit drug (excluding marijuana) were eliminated from the survey data set. This strategy removes surveys that are not taken seriously. This type of exaggeration is one of the clearest ways to identify non-valid surveys.
- In the second strategy, students were asked whether they had used a fictitious drug, Derbisol, in the past 30 days or in their lifetimes, as well as how old the students were when they first (if ever) used Derbisol. If students reported the use of Derbisol on two of these three questions, their surveys were not included in the analysis of the findings.
- The third 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 out of four of the following illicit drugs: alcohol, cigarettes, smokeless tobacco and marijuana; or (2) if they were inconsistent on the four remaining illicit drugs. An example of an inconsistent response would be if a student reported that he or she had used alcohol 3 to 5 times in the past 30 days but also never reported using alcohol in his or her lifetime.

As mentioned in the previous section, a total of 16,787 surveys were available for analysis. New Jersey students were cooperative and produced a high percentage of valid surveys. All but 747 students (4.5%) completed valid surveys (see Table 1). This level of cooperation is typical for most surveys of middle school students using the *Communities That Care*<sup>®</sup> *Youth Survey*. Of the 747 surveys identified and eliminated by one or more of the three strategies described above, 258 exaggerated illicit drug use (strategy 1), 422 reported the use of Derbisol (strategy 2), and 502 were identified because of logical inconsistencies in their answers (strategy 3). The elimination totals produced by these three strategies equal more than 747 because some surveys were identified by more than one strategy. After removal of the invalid surveys and the 38 student refusals, a total of 16,002 students remained for the analysis.

The total of 16,002 surveys were collected from schools from 20 of New Jersey 21 counties. For each county, the number of participating schools ranged from 1 to 6, with an average of 2.95 schools surveyed per county. Because of the relatively small number of schools included from each county, county-level findings should be interpreted cautiously.

Table 1. Number and percentage of New Jersey middle school students participating in the survey.

	<b>Number of Students</b>	<b>Percent of Students</b>
Non-Blank Surveys Returned for Processing	16,787	100.0
7th	8,328	49.6
8th	8,216	48.9
Unknown	243	1.4
Refusals	38	0.2
Ineligible—Total	747	4.5
Exaggerated Use	258	1.5
Derbisol	422	2.5
Inconsistencies	502	3.0
Valid Surveys Available for Analysis	16,002	95.3

Notes: “Non-Blank Surveys Returned for Processing” represents the number and percentage of students participating in the *2001 New Jersey Middle School Survey* who completed a survey form with at least some items filled out. Refusals are defined as students who did not provide valid responses to at least 20% of the survey items.

There are three strategies used to assess the validity of the surveys. The “Ineligible” section shows the number and percentage of students who were eliminated under each disqualifying criterion and the total number of students who were removed from the data analysis.

# Demographic Profile of Surveyed Youth

The survey measures a variety of demographic characteristics. The demographics of students providing valid surveys is presented in Table 2, and some characteristics of their home lives are presented in Table 3. Additional demographic data are presented in Table 4, which shows the family structure and number of adults living at home for participating students.

The percentages of students shown on Tables 2, 3 and 4, and on all remaining tables in the body of this report, are based on the total number of valid surveys, 16,002, which was reported in Table 1. Results are presented individually for each grade level, sex and ethnicity. Also note that percentages may not equal 100% because not all students responded to all questions.

A nearly equal number of students were surveyed in the 7<sup>th</sup> and 8<sup>th</sup> grades. A slightly higher percentage of the respondents were female (50.4% female compared to 48.3% male). Table 2 also shows the ethnic breakdown of the surveyed population. A majority of students identified themselves as White (62.9%). The largest minority population is Latino students (9.9%), followed by African American students (9.1%) and Asian students (4.3%). Approximately 9% of students checked the “Multiple” category. Note that while the “Other” category listed on all tables includes students who selected “Other” as their primary ethnicity, this category also includes students who checked American Indian as their ethnic background. These categories were combined because of the low number of American Indian students. The “Other” group totaled 3.3% of the students. For both gender and ethnicity, there were no significant differences between 7<sup>th</sup> and 8<sup>th</sup> grade students.

Table 3 shows selected characteristics of the home life of surveyed youth. These attributes include the primary language spoken at home and the “urbanicity” of primary residence (defined as the degree of population density in a student’s neighborhood). Again, the results are broken down by grade, sex and ethnicity. The “Primary Language Spoken at Home” refers to the primary language the student speaks at home (not necessarily the language spoken by the parents). The “Urbanicity of Primary Residence” category includes “city,” “country” or “farm.” Also note that “city” includes “city, town, or suburb.” Overall, it appears that a large majority of students in New Jersey participating in the survey speak English at home (89.7%) and live in the city (88.4%). Less than one in ten (9.9%) of the students indicated that they resided in the country.

Table 4 shows that the majority of participating students (66.5%) live in two-parent families. In the 1999 survey, only 48% of students lived in two-parent families. Also, the average number of adults living in the households of the surveyed students in New Jersey is 1.9. The average number of adults living in the household includes the parents and all other adults living there, whether they are relatives or not. As before, there are no significant differences between 7<sup>th</sup> and 8<sup>th</sup> grade students.

Demographic characteristics of students in each county were also computed. County-level demographic data are presented in table H1, which shows the percentage of students in each demographic category, and table H2, which shows the actual number of students in each demographic category. (All county-level tabular data are presented in Appendix H.) With some specific exceptions, at the county-level there was a generally good balance of 7<sup>th</sup> and 8<sup>th</sup> grade students, and male and female students. In Morris County, 26.6% of the students (55 of 207 students) did not respond to the grade question. The reason for this particular response in Morris County is unknown. In Cape May County, and to a lesser extent in Burlington, Essex, Somerset, and Union Counties, there was a relatively high level of 7<sup>th</sup> grade students. Because 7<sup>th</sup> graders consistently report lower levels of ATOD use and antisocial behavior than 8<sup>th</sup> graders, county-level findings on these variables will be somewhat biased towards an underestimate of the actual prevalence rate. Conversely, in Hudson County, there were significantly more 8<sup>th</sup> graders than 7<sup>th</sup> graders in the survey. This suggests a bias in the opposite direction, and an overestimate of the actual prevalence rate.

There was significant variation in ethnic makeup across the counties. For example, Essex County was heavily African American, Passaic County had a high proportion of Latino students, and several counties (Cape May, Morris, Salem, Sussex and Warren) had a high proportion of White students. The demographic variation in ethnic makeup observed in the survey findings is often reflective of the ethnic makeup of the county as a whole.

Table 2. Selected demographic characteristics of surveyed youth.

	<b>Number of Students</b>	<b>Percent of Students</b>
<b>Overall</b>		
Valid Cases	16,002	100.0
<b>Grade</b>		
7th	7,961	49.8
8th	7,820	48.9
Unknown	221	1.4
<b>Sex</b>		
Female	8,065	50.4
Male	7,729	48.3
Did Not Respond	208	1.3
<b>Ethnicity</b>		
White	10,063	62.9
African American	1,457	9.1
Latino	1,590	9.9
Asian	687	4.3
Other	530	3.3
Multiple	1,484	9.3
Unknown	191	1.2

Table 3. Selected characteristics of the home life of surveyed youth, by grade, sex and ethnicity.

	Primary Language Spoken at Home						Urbanicity of Primary Residence					
	English		Spanish		Other		Farm		Country		City	
	N	%	N	%	N	%	N	%	N	%	N	%
Overall	13,968	89.7	863	5.5	740	4.8	255	1.6	1,550	9.9	13,802	88.4
Grade												
7th	6,956	89.7	428	5.5	372	4.8	134	1.7	798	10.3	6,841	88.0
8th	6,855	89.7	425	5.6	358	4.7	113	1.5	734	9.6	6,815	88.9
Sex												
Female	7,021	89.2	469	6.0	384	4.9	104	1.3	764	9.7	7,042	89.0
Male	6,809	90.3	375	5.0	353	4.7	148	2.0	768	10.2	6,622	87.8
Ethnicity												
White	9,738	98.2	17	0.2	162	1.6	164	1.7	1,166	11.9	8,506	86.5
African American	1,383	97.2	3	0.2	37	2.6	5	0.3	78	5.4	1,351	94.2
Latino	706	47.4	755	50.7	29	1.9	23	1.5	85	5.5	1,446	93.1
Asian	381	57.1	0	0.0	286	42.9	4	0.6	32	4.7	642	94.7
Other	390	75.4	15	2.9	112	21.7	13	2.5	42	8.0	467	89.5
Multiple	1,257	88.7	65	4.6	95	6.7	46	3.2	136	9.4	1,266	87.4

Notes: “N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category.

Table 4. Selected characteristics of the home life of surveyed youth, by grade, sex and ethnicity.

	Two-Parent		One-Parent		Other		Average Number of Adults Living in Household	
	N	%	N	%	N	%	N	Adults
	Overall	10,636	66.5	4,798	30.0	568	3.5	16,002
Grade								
7th	5,348	67.2	2,340	29.4	273	3.4	7,961	2.0
8th	5,167	66.1	2,405	30.8	248	3.2	7,820	1.9
Sex								
Female	5,345	66.3	2,476	30.7	244	3.0	8,065	2.0
Male	5,202	67.3	2,255	29.2	272	3.5	7,729	1.9
Ethnicity								
White	7,409	73.6	2,474	24.6	180	1.8	10,063	1.9
African American	494	33.9	823	56.5	140	9.6	1,457	1.8
Latino	814	51.2	682	42.9	94	5.9	1,590	1.9
Asian	594	86.5	69	10.0	24	3.5	687	2.2
Other	328	61.9	178	33.6	24	4.5	530	2.0
Multiple	902	60.8	528	35.6	54	3.6	1,484	2.0

Notes: “N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category.

# Alcohol, Tobacco and Other Drug Use

## ***Presentation of the Findings***

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Alcohol, tobacco, and other drug use is measured by a set of 36 items on the *2001 New Jersey Middle School Survey*. The items are identical to the items used in the 1999 survey, except for the addition of items measuring the use of club drugs, bidis, and clove cigarettes. Most of these items are also comparable to those used in the *Monitoring the Future* study, an annual study of drug use by middle and high school students. The *Monitoring the Future* survey is conducted annually by the Survey Research Center of the Institute for Social Research at the University of Michigan. (For a review of the methodology of this study, please see Johnston, O'Malley, & Bachman, 1999, 2000.) The *Monitoring the Future* survey project provides national prevalence of use information for alcohol, tobacco, and other illicit drugs from a representative sample of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders. For many years the *Monitoring the Future* survey has served as the primary reference for determining the prevalence of alcohol, tobacco, and other illicit drug use among adolescents in the United States. The *Communities That Care*<sup>®</sup> *Youth Survey* also measures alcohol, tobacco, and other illicit drug use using the same survey questions used in the *Monitoring the Future* survey.

Tables 5 to 34 show the use of alcohol, tobacco, and other illicit drugs (ATODs) by middle school students in New Jersey. There are two distinct ways in which data that depict student involvement in ATOD use are provided. First, prevalence rates are used to illustrate the percentage of students who reported using an ATOD substance. A prevalence rate is the percentage of students who reported use of a drug at least once in the specified prevalence time period. These results are presented for three prevalence periods: lifetime (whether the student has ever used the ATOD substance), annual (whether the student has used the ATOD substance within 12 months prior to the survey date) and past 30 days (whether the student has used the ATOD substance within 30 days prior to the survey date). Table 5 is an example of the presentation of prevalence rates and shows the prevalence rates for New Jersey middle school students as measured in surveys conducted in 1995, 1999, and 2001, as well as data from the 2000 *Monitoring the Future* survey.

Second, frequency tables are used to illustrate the number of occasions that students reported using a specific illicit drug (e.g., Table 8). For those who reported the use of alcohol within the past 30 days, Table 8 shows the number of occasions that they reported using it. Please note that when the prevalence rate is quite low (i.e., less than 2%), larger sample sizes are required to reliably estimate the prevalence rate as well as the frequency of use. Also, because of the number of frequency of use categories presented on each table, a rounding error will sometimes lead to percentages that don't sum to exactly 100%.

Results at the county level are also discussed throughout the report. The tabular county-level findings are included in Appendix H. Because of the relatively small number of schools from each of the counties, results from specific counties should be interpreted cautiously. In counties

with few participating schools, it cannot be assumed that the participating students are representative of the county as a whole.

## ***Summary of the ATOD Findings***

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Tables 5 and 6 show the results from the 2001 survey, along with comparison results from the New Jersey 1995 survey, the New Jersey 1999 survey and the 2000 *Monitoring the Future* survey. The most recent results demonstrate a continued reduction in the levels of ATOD use by New Jersey middle school students. For virtually all drugs, the highest prevalences were recorded in the 1995 survey, followed by reductions in use as measured in the 1999 survey, and continued reductions in the 2001 survey.

In addition, New Jersey 8<sup>th</sup> grade students are reporting lower levels of use for many substances than those reported in the 2000 *Monitoring the Future* study. (*Monitoring the Future* data are based on 8<sup>th</sup> grade respondents only. So, the only direct comparison possible is with New Jersey's 8<sup>th</sup> grade data.) The significant exception to this trend is that alcohol prevalence rates for New Jersey 8<sup>th</sup> grade students are very similar to *Monitoring the Future* results. For all other ATOD use, results for New Jersey 8<sup>th</sup> grade students compare favorably to the *Monitoring the Future* results.

Table 5. Summary of the prevalence of use for alcohol, tobacco, marijuana and inhalants, for New Jersey middle school surveys conducted in 1995, 1999, and 2001.

	1995 Survey			1999 Survey						2001 Survey						2000 <i>Monitoring the Future</i> (8th Grade)
	7th	8th	Overall	7th		8th		Overall		7th		8th		Overall		
	%	%	%	N	%	N	%	N	%	N	%	N	%	N	%	%
Alcohol, Lifetime	52.0	63.0	57.0	4,105	48.1	3,755	58.0	7,860	52.8	7,177	37.0	7,044	53.3	14,567	44.6	51.7
Alcohol, Annual	44.0	55.0	49.0	4,104	42.1	3,799	50.8	7,903	46.2	7,109	23.3	7,041	39.3	14,490	31.0	43.1
Alcohol, 30 Days	24.0	36.0	30.0	4,123	19.5	3,803	30.2	7,926	24.6	7,150	10.4	7,052	21.7	14,538	16.0	22.4
Alcohol, Binge Drinking	*	*	*	4,119	7.0	3,825	12.6	7,944	9.7	7,081	5.7	7,042	9.8	14,465	7.6	14.1
Cigarettes, Lifetime	36.0	44.0	40.0	4,173	32.8	3,827	44.6	8,000	38.4	7,359	19.6	7,209	31.5	14,923	25.2	40.5
Cigarettes, Annual	29.0	38.0	33.0	4,153	16.8	3,832	23.9	7,985	20.2	7,294	8.5	7,149	16.5	14,801	12.3	*
Cigarettes, 30 Days	16.0	24.0	20.0	4,127	9.4	3,842	15.8	7,969	12.5	7,190	4.6	7,054	10.2	14,599	7.2	14.6
Smokeless Tobacco, Lifetime	*	*	*	4,181	5.5	3,847	8.8	8,028	7.1	7,453	3.8	7,246	5.3	15,064	4.5	12.8
Smokeless Tobacco, Annual	*	*	*	*	*	*	*	*	*	7,338	2.9	7,182	4.4	14,879	3.6	*
Smokeless Tobacco, 30 Days	*	*	*	4,179	2.4	3,846	3.9	8,025	3.1	7,288	1.9	7,141	2.7	14,782	2.3	4.2
Bidis, Lifetime	*	*	*	*	*	*	*	*	*	7,160	1.6	7,035	4.1	14,542	2.8	*
Bidis, Annual	*	*	*	*	*	*	*	*	*	7,130	1.8	6,943	3.5	14,413	2.6	*
Bidis, 30 Days	*	*	*	*	*	*	*	*	*	7,157	1.5	6,965	2.1	14,463	1.8	*
Clove Cigarettes, Lifetime	*	*	*	*	*	*	*	*	*	7,202	1.4	7,107	3.3	14,659	2.3	*
Clove Cigarettes, Annual	*	*	*	*	*	*	*	*	*	7,245	1.4	7,086	2.9	14,670	2.1	*
Clove Cigarettes, 30 Days	*	*	*	*	*	*	*	*	*	7,185	0.8	7,025	1.8	14,557	1.3	*
Marijuana, Lifetime	9.0	18.0	14.0	4,076	7.6	3,788	16.3	7,864	11.8	7,157	3.3	7,139	9.7	14,646	6.4	20.3
Marijuana, Annual	8.0	17.0	13.0	4,073	6.1	3,797	14.0	7,870	9.8	7,060	2.2	7,040	7.8	14,440	4.9	15.6
Marijuana, 30 Days	5.0	12.0	8.0	4,049	3.6	3,785	9.9	7,834	6.6	6,998	1.3	7,010	4.7	14,335	2.9	9.1
Inhalants, Lifetime	10.0	11.0	10.0	4,049	8.4	3,758	7.6	7,807	8.0	7,094	8.8	7,079	9.4	14,507	9.1	17.9
Inhalants, Annual	8.0	9.0	8.0	3,977	7.2	3,746	6.1	7,723	6.6	7,031	4.9	7,014	5.0	14,382	4.9	9.4
Inhalants, 30 Days	4.0	5.0	4.0	3,987	3.6	3,733	3.2	7,720	3.4	7,019	3.0	6,988	2.7	14,336	2.9	4.5

Notes: 1995 and 1999 survey results are reported in "The 1999 New Jersey Middle School Survey: A Statewide Report" (p. 14). A "\*" indicates that data were not collected for that drug and/or specific prevalence of use period in that survey year. The *Monitoring the Future* survey collects data only for 8th, 10th, and 12th grades.

Table 6. Summary of the prevalence of illicit drug use for New Jersey middle school surveys conducted in 1995, 1999, and 2001.

	1995 Survey			1999 Survey						2001 Survey						2000 <i>Monitoring the Future</i>
	7th	8th	Overall	7th		8th		Overall		7th		8th		Overall		(8th Grade)
	%	%	%	N	%	N	%	N	%	N	%	N	%	N	%	%
Hallucinogens, Lifetime	*	*	*	4,060	1.3	3,772	2.8	7,832	2.0	7,126	0.4	7,100	1.1	14,565	0.8	4.6
Hallucinogens, Annual	*	*	*	4,055	0.9	3,780	2.6	7,835	1.7	7,033	0.5	7,001	0.8	14,376	0.6	2.8
Hallucinogens, 30 Days	*	*	*	4,047	0.5	3,773	1.4	7,820	1.0	7,015	0.2	6,994	0.6	14,351	0.4	1.2
Club Drugs, Lifetime	*	*	*	*	*	*	*	*	*	6,956	1.5	6,970	3.3	14,255	2.4	*
Club Drugs, Annual	*	*	*	*	*	*	*	*	*	6,841	0.9	6,888	2.0	14,052	1.5	*
Club Drugs, 30 Days	*	*	*	*	*	*	*	*	*	6,827	0.7	6,869	1.2	14,021	0.9	*
Cocaine or Crack, Lifetime	2.0	3.0	3.0	4,034	1.5	3,766	2.5	7,800	2.0	6,960	0.8	6,962	1.7	14,234	1.2	4.5
Cocaine or Crack, Annual	2.0	3.0	2.0	4,036	1.2	3,778	1.7	7,814	1.4	6,830	0.4	6,865	1.0	14,009	0.7	2.6
Cocaine or Crack, 30 Days	1.0	2.0	1.0	4,031	0.6	3,772	0.9	7,803	0.8	6,813	0.3	6,843	0.5	13,964	0.4	1.2
Heroin, Lifetime	*	*	*	3,952	0.5	3,716	1.4	7,668	1.0	6,911	0.4	6,909	1.1	14,119	0.8	1.9
Heroin, Annual	*	*	*	3,955	0.4	3,717	1.0	7,672	0.7	6,769	0.2	6,803	0.7	13,861	0.5	1.1
Heroin, 30 Days	*	*	*	3,957	0.3	3,717	0.8	7,674	0.5	6,749	0.1	6,799	0.3	13,842	0.2	0.5
Other Illicit Drugs, Lifetime	*	*	*	3,932	7.6	3,698	9.9	7,630	8.7	6,902	1.8	6,911	4.4	14,107	3.1	*
Other Illicit Drugs, Annual	*	*	*	3,934	5.1	3,699	7.7	7,633	6.4	6,780	1.2	6,817	2.9	13,883	2.0	*
Other Illicit Drugs, 30 Days	*	*	*	3,961	3.1	3,720	5.7	7,681	4.3	6,754	0.5	6,789	1.7	13,830	1.1	*
Any Illicit Drug, Lifetime †	*	*	*	3,978	18.0	3,628	23.5	7,606	20.7	7,218	12.4	7,169	19.0	14,740	15.6	*
Any Illicit Drug, Annual †	*	*	*	3,980	14.7	3,641	20.6	7,621	17.5	7,130	7.6	7,100	13.0	14,581	10.2	*
Any Illicit Drug, 30 days †	*	*	*	4,001	8.7	3,632	14.5	7,633	11.5	7,120	4.7	7,108	8.0	14,568	6.3	*

† In the 2001 survey, “Any Illicit Drug” was defined as any ATOD substance except for alcohol and tobacco products. In the 1999 survey, “Any Illicit Drug” was defined the same way, except that information specifically on club drugs (Ecstasy, GBH, Rohypnol®, and ketamine) was not collected. Instead, the 1999 survey asked students to report on “Other Drugs” not otherwise asked about in that survey.

Notes: 1995 and 1999 survey results are reported in “The 1999 New Jersey Middle School Survey: A Statewide Report” (p. 14). A “\*” indicates that data were not collected for that drug and/or specific prevalence of use period in that survey year. The *Monitoring the Future* survey collects data only for 8th, 10th, and 12th grades. For “Cocaine or Crack,” the *Monitoring the Future* prevalence rates are based on cocaine only.

# Alcohol

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The most available, attractive and pervasive drug for adolescents is alcohol. This includes beer, wine and hard liquor. It is the drug used most often, and arguably it does more damage than any other.

Longitudinal findings from the *Monitoring the Future* study highlight the pervasiveness of alcohol use in middle and high schools today. In 2000, the percentage of 8<sup>th</sup> graders who reported using alcohol in the past month was 22.4%. This rate held steady throughout the 1990s. Given the national prevalence of alcohol, it is not surprising that alcohol is the most used drug among New Jersey middle school students.

Findings for alcohol use by New Jersey middle school students are presented in Tables 7, 8, 9 and 10. The lifetime use of alcohol is a good measure of student experimentation, and is presented in Table 7. Of the surveyed 7<sup>th</sup> and 8<sup>th</sup> grade students in New Jersey, 44.6% have used alcohol sometime in their lifetimes. Lifetime prevalence rates for alcohol use range from a low of 37.0% for 7<sup>th</sup> graders to a high of 53.3% for 8<sup>th</sup> graders. Findings from the *Monitoring the Future* study indicate a lifetime alcohol prevalence of 51.7% for 8<sup>th</sup> graders nationwide. Thus, the 8<sup>th</sup> graders in New Jersey appear to be experimenting with alcohol at a similar rate to their national counterparts.

There was little variation in lifetime alcohol use between New Jersey males and females. However, typical of many national studies, there are some prevalence differences among the ethnic groups. Most often, African American and Asian students report the lowest rates of alcohol use, with White and Latino students' rates being significantly higher. This pattern holds true in New Jersey. For example, Asian and African American students reported the lowest lifetime rates, at 27.4% and 36.3%, respectively. All of the remaining ethnic groups reported rates within a relatively narrow range, from 44.8% to 51.6%.

There was some variation between counties in the lifetime alcohol use rates (see Table H3). For example, Salem County had the highest lifetime prevalence rate of 53.9%, followed by Monmouth, at 51.6%. Lowest rates were found for Cape May (37.1%), Essex (37.1%), and Morris (36.5%). However, caution must be used when interpreting county-level findings. The county-level prevalence rate is influenced by many variables, such as a number of demographic variables. Furthermore, the role of self-selection in the schools participating in the survey is unknown. That is, school participation was voluntary. Within-county averages and rates can be affected in unknown ways by the participation of specific schools within a county.

The 30-day prevalence of alcohol is a good measure of current use of alcohol. Sixteen percent of New Jersey middle school students used alcohol in the past 30 days, with 21.7% of 8<sup>th</sup> graders and 10.4% of 7<sup>th</sup> graders reporting use. The 8<sup>th</sup> grade 30-day prevalence rate is similar to the estimate from the *Monitoring the Future* study (see Table 5).

As with the lifetime alcohol use rates, there was little variation between males and females in the 30-day prevalence rates, but there was significant variation among ethnic groups. Paralleling the lifetime results, Asian and African American students had the lowest 30-day prevalence rates (5.7% and 9.6%, respectively). All other groups had 30-day rates from 16.5% to 21.2%.

Discrepancies were also found among counties. For example, Passaic had the highest 30-day rate, at 24.3%. This was more than three times higher than the findings for Cape May, the county with the lowest prevalence rate (7.7%). Rates for the other counties fell between these extremes.

The frequency of alcohol use is summarized on Table 8. This table shows the percentage of students who reported using alcohol in the past 30 days as well as the number of times that they reported using it. (For all frequency tables reporting on ATOD use, the number of occasions of use has been aggregated into four categories: Never, 1-2 occasions, 3-5 occasions, and 6 or more occasions.) For instance, 13.7% of 8th graders indicated that they had used alcohol from 1 to 2 times in the past month. There were only small numbers of students who reported that they had used alcohol in the higher frequency categories of 3-5 occasions and 6 or more occasions. For gender and ethnicity, the frequency findings mirror the overall prevalence rates. There was little variation between males and females. Among ethnic groups, Asian and African American students showed the lowest rates with rates for other ethnic groups clustered at higher rates.

Findings on binge drinking (defined as having five or more drinks in a row within the past two weeks) are likely to be among the most important findings related to alcohol use (Johnston, O'Malley, & Bachman, 1999). Several studies have shown that binge drinking is related to higher probabilities of drinking and driving as well as injury due to intoxication. Analysis of binge drinking for New Jersey middle school students is presented on Tables 5, 7 and 9. Table 5 shows that 8<sup>th</sup> grade New Jersey students are involved in binge drinking at a lower rate than 8<sup>th</sup> grade students in the *Monitoring the Future* study. Only 9.8% of 8<sup>th</sup> grade students and 5.7% of 7<sup>th</sup> grade students reported binge drinking.

There are only insignificant differences between the sexes regarding binge drinking. For the various ethnic groups, the lowest binge drinking rate was reported by Asian students (2.4%). White and African American students reported rates of 6.0% and 7.2%, respectively. The remaining ethnic groups reported binge drinking rates from 10.0% (Multiple) to 14.5% (Latino).

As with lifetime and 30-day alcohol use, we found variations by county. Passaic County had the highest rate, at 16.6%. Two counties, Cape May (3.0%) and Morris (1.7%), had very low rates of binge drinking. Many of the participating New Jersey counties had rates ranging from five to nine percent.

New Jersey students also reported on their sources of the alcohol they used (see Table 10). Of those students who reported that they do drink, the two largest sources were the home and friends. While home was the major source for both 7<sup>th</sup> and 8<sup>th</sup> grade students, friends were also a significant source of alcohol for 8<sup>th</sup> graders.

Table 7. Lifetime, annual, and 30-day use of alcohol and involvement in binge drinking, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day		Binge	
	N	%	N	%	N	%	N	%
Overall	14,567	44.6	14,490	31.0	14,538	16.0	14,465	7.6
Grade								
7th	7,177	37.0	7,109	23.3	7,150	10.4	7,081	5.7
8th	7,044	53.3	7,041	39.3	7,052	21.7	7,042	9.8
Sex								
Female	7,553	44.3	7,555	31.1	7,573	16.0	7,538	7.2
Male	6,854	44.9	6,783	30.9	6,815	15.8	6,772	8.0
Ethnicity								
White	7,724	46.7	7,721	33.1	7,746	16.5	7,701	6.0
African American	2,144	36.3	2,087	20.7	2,085	9.6	2,052	7.2
Latino	1,841	48.6	1,835	36.1	1,845	21.2	1,838	14.5
Asian	773	27.4	772	15.1	775	5.7	765	2.4
Other	554	44.8	549	35.7	558	20.8	558	10.2
Multiple	1,352	51.6	1,351	36.4	1,352	19.7	1,374	10.0

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used alcohol or binged.

Table 8. Frequency of alcohol use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	14,538	84.0	16.0	10.4	2.9	2.7
Grade						
7th	7,150	89.6	10.4	7.2	1.4	1.8
8th	7,052	78.3	21.7	13.7	4.4	3.7
Sex						
Female	7,573	84.0	16.0	10.6	3.0	2.4
Male	6,815	84.2	15.8	10.1	2.8	2.9
Ethnicity						
White	7,746	83.5	16.5	11.1	2.9	2.5
African American	2,085	90.4	9.6	7.2	1.1	1.3
Latino	1,845	78.8	21.2	12.4	4.8	4.0
Asian	775	94.3	5.7	3.9	0.8	1.0
Other	558	79.2	20.8	11.3	5.4	4.1
Multiple	1,352	80.3	19.7	12.2	3.3	4.2

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 9. Frequency of binge drinking during the past two weeks, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1	2	3+
		%	%	%	%	%
Overall	14,465	92.4	7.6	3.9	2.0	1.8
Grade						
7th	7,081	94.3	5.7	3.2	1.3	1.2
8th	7,042	90.2	9.8	4.7	2.6	2.4
Sex						
Female	7,538	92.8	7.2	3.7	2.0	1.5
Male	6,772	92.0	8.0	4.1	1.9	1.9
Ethnicity						
White	7,701	94.0	6.0	3.1	1.4	1.5
African American	2,052	92.8	7.2	3.7	2.1	1.4
Latino	1,838	85.5	14.5	7.3	4.4	2.8
Asian	765	97.6	2.4	1.8	0.0	0.5
Other	558	89.8	10.2	5.9	2.0	2.3
Multiple	1,374	90.0	10.0	4.7	2.9	2.5

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 10. Sources of alcohol and cigarettes, 1999 and 2001.

	1999 Survey			2001 Survey		
	7th % (n = 3,942)	8th % (n = 3,512)	Overall % (n = 7,454)	7th % (n = 6,847)	8th % (n = 6,777)	Overall % (n = 13,925)
<b>Alcohol</b>						
Home	11.6	14.2	12.8	7.3	12.5	9.7
Liquor stores	1.7	3.4	2.5	1.6	2.2	1.9
Friends	9.4	16.3	12.6	4.0	10.8	7.3
Bars/Restaurants/Lounges	0.6	0.5	0.6	0.4	0.6	0.5
Other	5.1	6.3	5.7	3.8	5.1	4.4
I don't drink	71.7	59.3	65.9	82.9	68.8	76.1
<b>Cigarettes</b>						
	7th % (n = 3,928)	8th % (n = 3,560)	Overall % (n = 7,488)	7th % (n = 6,862)	8th % (n = 6,835)	Overall % (n = 13,993)
Vending machines	1.6	1.8	1.7	0.8	0.5	0.7
Bought over the counter	1.6	2.9	2.2	1.1	1.9	1.5
Someone else buys them	3.1	5.7	4.4	1.3	3.5	2.4
Home	3.6	3.3	3.4	1.9	3.0	2.4
Friends	8.6	10.9	9.7	3.4	7.6	5.4
Other	2.6	3.0	2.8	1.9	2.6	2.3
I don't smoke	78.9	72.3	75.8	89.6	80.9	85.4

Notes: 1999 survey results are reported in "The 1999 New Jersey Middle School Survey: A Statewide Report" (p. 18). The 1999 "Overall %" is the combination of students who indicated they were in the 7th or 8th grade. The 2001 "Overall %" is made up of students who indicated they were in the 7th or 8th grade, plus those students who did not indicate a grade level.

## Tobacco

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After alcohol, tobacco (including cigarettes and smokeless tobacco) is the second most commonly used illicit drug among adolescents. This section of the report discusses the prevalence of tobacco products. Bidis and clove cigarettes are also included in this section. National trends show a decline in both cigarette and smokeless tobacco use between 1995 and 2000. According to *Monitoring the Future*, past-30-day prevalence rates for cigarette use declined 4.5 percentage points among 8<sup>th</sup> graders, 4 percentage points among 10<sup>th</sup> graders, and 2.1 percentage points among 12<sup>th</sup> graders. Past-30-day prevalence rates for smokeless tobacco declined 2.9 percentage points among 8<sup>th</sup> graders, 3.6 percentage points among 10<sup>th</sup> graders, and 4.6 percentage points among 12<sup>th</sup> graders.

### Cigarettes

Table 11 presents the lifetime, annual, and 30-day prevalence of cigarette use for New Jersey middle school students. Overall, 25.2% of students have used cigarettes sometime in their lifetimes, 12.3% reported use in the past year, and 7.2% reported using cigarettes in the past 30 days. Lifetime prevalence of cigarette use for 8<sup>th</sup> grade students in New Jersey was 31.5%, and for 7<sup>th</sup> grade students, 19.6%. For 30-day use of cigarettes, the comparable 8<sup>th</sup> grade and 7<sup>th</sup> grade figures were 10.2% and 4.6%, respectively. Compared to the 8<sup>th</sup> grade results from the *Monitoring the Future* study (see Table 5), rates for prevalence of cigarette use by 8<sup>th</sup> grade students in New Jersey appear to be lower for both lifetime and past 30-day prevalence periods.

Besides showing lower cigarette use by New Jersey middle school students compared to recent *Monitoring the Future* data, Table 5 also shows that cigarette use has declined substantially since 1999. Specifically, the 30-day prevalence of cigarette use for New Jersey middle school students has decreased from 12.5% in 1999 to 7.2% in 2001. Equally impressive declines were also recorded for lifetime and annual cigarette use. These declines are consistent with the generally decreasing levels of use of other drugs among New Jersey middle school students.

Comparing findings for cigarette use between the sexes reveals that females smoke at a higher rate than males (7.6% of females versus 6.6% of males) for past 30-day use. In Table 11, female students in New Jersey reported lifetime and annual use of cigarettes at about two percent higher than the male students.

While there was little variation by gender, there were significant variations in cigarette use by ethnic group. For example, for lifetime prevalence, Asian students reported 11.6%, and Latino students reported 33.6%—nearly three times higher than Asian students. The same variation is also present for both annual and 30-day prevalence periods. For the 30-day period, the Asian students again had the lowest prevalence rate, at 4.3%. Among Latino students, a significantly higher percentage (10.7%) reported cigarette use in the past 30 days.

The frequency of cigarette use in the past 30 days is summarized in Table 12. In this table, the data summarizing how many cigarettes *per day* the students reported smoking are reported. Table 12 shows that for students who reported use in the past 30 days, 4.2% reported an average of less than 1 cigarette per day.

Examining county-level findings, there appears to be somewhat less variation in cigarette use among counties than there was for alcohol use (see Table H3). For example, three counties reported 30-day use higher than 10%: Salem (13.5%), Hudson (11.5%), and Ocean (10.5%). The three lowest rates were reported by Morris (3.2%), Union (4.2%), and Hunterdon (4.5%).

## **Smokeless Tobacco**

Compared to cigarette use, relatively low use of smokeless (chewing) tobacco was reported (see Tables 13 and 14). The lifetime prevalence rate of smokeless tobacco use in New Jersey middle schools is lower than rates reported from the *Monitoring the Future* study and the past-30-day prevalence rate is similar, compared to the national rate (see Table 5). Among the small percentage of students who did report smokeless tobacco use in the past 30 days (2.3%), the majority (1.2%) reported use once a day or more (see Table 14). Although the prevalence rates were low, there was a clear trend showing that boys used more smokeless tobacco than girls. Also of note, African American students reported a 4.3% prevalence rate for use in the past 30 days. This is the highest of the ethnic groups. Asian students reported the lowest past 30-day rates, at 0.9%. County-level findings are presented in Table H3. County-level 30-day prevalence rates ranged from a low of 0.0% in Morris County to a high of 4.8% in Essex County.

## **Bidis and Clove Cigarettes**

Survey results reporting on the use of bidis by New Jersey middle school students are presented in Tables 15 and 16, and results for clove cigarettes are presented in Tables 17 and 18. A bidi is a small, unfiltered tobacco cigarette produced in India. Clove cigarettes are cigarettes produced without tobacco, and have had occasional popularity for several years.

The lifetime prevalence rates for both bidis and clove cigarettes are quite low: 2.8% for bidis, and 2.3% for clove cigarettes. The 30-day prevalence rates for bidis and clove cigarettes are, respectively, 1.8% and 1.3%. As would be expected, use is higher among 8<sup>th</sup> grade students, compared to 7<sup>th</sup> grade students. Also, males were more likely to report bidi use than females. Finally, as with cigarettes, there were meaningful differences among ethnic groups for all prevalence periods. For bidis, students in the Other or Multiple ethnicity categories showed the highest 30-day prevalence rates, at 2.6% and 2.7%, respectively. For clove cigarettes, the Latino and Multiple ethnic groups showed the highest rates, at 1.9% and 2.0%, respectively. At these low levels, variation among specific subgroups may not be reliable because of the small numbers of students reporting use.

There was limited county-level variation in use of bidis (see Table H3). The highest rates for bidis, both lifetime and past 30 days, were reported by Burlington and Ocean Counties.

Burlington showed lifetime and past 30-day rates at 5.1% and 3.5%, respectively. For Ocean County, the comparable numbers were 5.2% and 2.7%. Some counties had very low rates. For example, Mercer County had lifetime and past 30-day rates of 1.5% and 0.9%, respectively.

Table 11. Lifetime, annual, and 30-day prevalence of use for cigarettes, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,923	25.2	14,801	12.3	14,599	7.2
Grade						
7th	7,359	19.6	7,294	8.5	7,190	4.6
8th	7,209	31.5	7,149	16.5	7,054	10.2
Sex						
Female	7,687	26.1	7,657	13.3	7,536	7.6
Male	7,080	24.0	6,987	11.0	6,913	6.6
Ethnicity						
White	7,885	22.4	7,862	11.9	7,821	6.7
African American	2,195	27.5	2,137	11.2	2,070	5.9
Latino	1,912	33.6	1,896	16.4	1,842	10.7
Asian	780	11.6	776	5.8	773	4.3
Other	569	29.3	566	12.0	557	8.1
Multiple	1,399	32.3	1,387	14.8	1,375	8.7

Notes: "N" represents the total number of students who provided a valid response to the survey questions. "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 12. Frequency of cigarette use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Daily Frequency of Cigarette Use		
		Never	Any	< 1	1-5	6+
		%	%	%	%	%
Overall	14,599	92.8	7.2	4.2	1.3	1.7
<b>Grade</b>						
7th	7,190	95.4	4.6	2.8	0.8	1.1
8th	7,054	89.8	10.2	5.9	1.9	2.3
<b>Sex</b>						
Female	7,536	92.4	7.6	4.7	1.5	1.4
Male	6,913	93.4	6.6	3.6	1.1	1.8
<b>Ethnicity</b>						
White	7,821	93.3	6.7	3.9	1.3	1.5
African American	2,070	94.1	5.9	3.5	0.8	1.6
Latino	1,842	89.3	10.7	5.9	2.6	2.2
Asian	773	95.7	4.3	3.0	1.2	0.1
Other	557	91.9	8.1	5.2	0.9	2.0
Multiple	1,375	91.3	8.7	5.5	1.0	2.2

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Daily Frequency of Cigarette Use” categories sum to the “Any” category.

Table 13. Lifetime, annual, and 30-day prevalence of use for smokeless tobacco, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	15,064	4.5	14,879	3.6	14,782	2.3
Grade						
7th	7,453	3.8	7,338	2.9	7,288	1.9
8th	7,246	5.3	7,182	4.4	7,141	2.7
Sex						
Female	7,756	2.8	7,714	2.3	7,670	1.6
Male	7,147	6.2	7,001	4.8	6,950	2.9
Ethnicity						
White	7,948	4.4	7,892	3.0	7,852	1.7
African American	2,228	4.4	2,172	5.0	2,135	4.3
Latino	1,933	5.7	1,899	5.1	1,896	3.2
Asian	784	3.7	778	1.9	781	0.9
Other	569	2.8	566	2.8	563	2.1
Multiple	1,423	5.2	1,395	4.1	1,384	2.5

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 14. Frequency of smokeless tobacco use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2 times per month	1-2 times per week	Once a day or more
		%	%	%	%	%
Overall	14,782	97.7	2.3	0.8	0.3	1.2
Grade						
7th	7,288	98.1	1.9	0.7	0.2	1.1
8th	7,141	97.3	2.7	0.9	0.5	1.3
Sex						
Female	7,670	98.4	1.6	0.5	0.2	0.8
Male	6,950	97.1	2.9	1.0	0.5	1.5
Ethnicity						
White	7,852	98.3	1.7	0.7	0.3	0.7
African American	2,135	95.7	4.3	1.1	0.3	3.0
Latino	1,896	96.8	3.2	1.3	0.7	1.2
Asian	781	99.1	0.9	0.3	0.1	0.5
Other	563	97.9	2.1	0.9	0.4	0.9
Multiple	1,384	97.5	2.5	0.4	0.4	1.6

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 15. Lifetime, annual, and 30-day prevalence of use for bidis, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,542	2.8	14,413	2.6	14,463	1.8
Grade						
7th	7,160	1.6	7,130	1.8	7,157	1.5
8th	7,035	4.1	6,943	3.5	6,965	2.1
Sex						
Female	7,559	2.1	7,465	2.3	7,523	1.4
Male	6,835	3.6	6,792	2.9	6,790	2.1
Ethnicity						
White	7,732	2.3	7,650	2.2	7,697	1.5
African American	2,103	4.0	2,097	3.3	2,072	1.8
Latino	1,864	3.1	1,838	3.3	1,863	2.0
Asian	757	2.0	758	1.8	765	1.4
Other	541	2.9	536	2.9	534	2.6
Multiple	1,373	4.1	1,370	3.4	1,363	2.7

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 16. Frequency of bidi use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	14,463	98.2	1.8	0.9	0.1	0.8
Grade						
7th	7,157	98.5	1.5	0.7	0.1	0.6
8th	6,965	97.9	2.1	1.0	0.2	1.0
Sex						
Female	7,523	98.6	1.4	0.8	0.1	0.6
Male	6,790	97.9	2.1	0.9	0.2	1.0
Ethnicity						
White	7,697	98.5	1.5	0.7	0.2	0.6
African American	2,072	98.2	1.8	0.8	0.0	1.0
Latino	1,863	98.0	2.0	1.1	0.1	0.9
Asian	765	98.6	1.4	1.2	0.0	0.3
Other	534	97.4	2.6	0.6	0.0	2.1
Multiple	1,363	97.3	2.7	1.2	0.1	1.4

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 17. Lifetime, annual, and 30-day prevalence of use for clove cigarettes, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,659	2.3	14,670	2.1	14,557	1.3
Grade						
7th	7,202	1.4	7,245	1.4	7,185	0.8
8th	7,107	3.3	7,086	2.9	7,025	1.8
Sex						
Female	7,596	1.9	7,609	1.8	7,564	0.9
Male	6,906	2.6	6,906	2.3	6,838	1.5
Ethnicity						
White	7,789	2.3	7,785	2.2	7,772	1.1
African American	2,126	1.3	2,143	1.1	2,095	0.9
Latino	1,884	3.7	1,879	3.1	1,858	1.9
Asian	770	1.5	769	1.4	768	1.4
Other	550	1.9	542	1.5	537	1.1
Multiple	1,370	3.1	1,381	3.1	1,362	2.0

Notes: “N” represents the total number of students who provided a valid response to the survey questions.  
“%” represents the percentage of the total number of students who reported that they have used the drug.

Table 18. Frequency of clove cigarette use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	14,557	98.7	1.3	0.7	0.2	0.4
Grade						
7th	7,185	99.2	0.8	0.4	0.1	0.3
8th	7,025	98.2	1.8	1.0	0.2	0.5
Sex						
Female	7,564	99.1	0.9	0.6	0.1	0.3
Male	6,838	98.5	1.5	0.8	0.2	0.5
Ethnicity						
White	7,772	98.9	1.1	0.6	0.1	0.4
African American	2,095	99.1	0.9	0.2	0.3	0.3
Latino	1,858	98.1	1.9	1.2	0.2	0.6
Asian	768	98.6	1.4	0.9	0.3	0.3
Other	537	98.9	1.1	0.7	0.2	0.2
Multiple	1,362	98.0	2.0	1.2	0.1	0.7

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

# Marijuana

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During the 1990s, there were major changes in trends of marijuana use throughout the United States. After a dramatic increase in the early 1990s—when rates for 8<sup>th</sup> and 10<sup>th</sup> graders doubled or nearly doubled—the lifetime and 30-day prevalence of marijuana use by students stabilized at that higher rate (Johnston, O’Malley & Bachman, 2000). These rates have remained stable for the last five years.

While national rates were stable in the latter half of the 1990s, New Jersey middle school students showed a slight decline in marijuana use from 1995 to 1999 (see Table 5). In 1995, lifetime and 30-day prevalence rates for marijuana were 14.0% and 8.0%, respectively. In 1999, these rates had declined slightly, to 11.8% and 6.6%, for lifetime and 30-day rates, respectively.

The current findings among New Jersey middle school students for marijuana use show a continuing decline in prevalence. Compared to results from the *Monitoring the Future* study, New Jersey 8<sup>th</sup> grade student use is substantially below the national average. For example, in their lifetimes, 9.7% of 8<sup>th</sup> grade students in New Jersey have used marijuana or hashish. This compares quite favorably with the national *Monitoring the Future* estimate of 20.3% for 8<sup>th</sup> grade students. For 7<sup>th</sup> graders, the current lifetime prevalence rate (3.3%) is significantly lower than 1995 and 1999 rates (14.0% and 7.6%, respectively). The 30-day prevalence rates are also lower compared to previous New Jersey surveys and *Monitoring the Future* data. For example, the combined 7<sup>th</sup> and 8<sup>th</sup> grade 30-day prevalence rate was estimated at 8.0% in 1995. This declined slightly to 6.6% in 1999, and current results show a significant decline to approximately 2.9%.

Table 19 presents the lifetime, annual and past-30-day prevalence of marijuana use, by grade level, sex and ethnicity. For past-30-day use, the overall prevalence rates are less than 3%. As would be expected, 8<sup>th</sup> grade use (4.7%) is higher than 7<sup>th</sup> grade use (1.3%). Males report a slightly higher level of use than females. Students categorized as Multiple and Latino students, reported the highest 30-day prevalence rates, at 4.7% and 3.5%, respectively.

Table 20 summarizes the frequency of marijuana use during the past 30 days. Of those New Jersey middle school students who did report marijuana use in the past 30 days, a majority (51.7%) reported use 1-2 times. Approximately 1% of students reported the highest frequency of use, 6 or more times. Within this high-use category, 8<sup>th</sup> grade students, and students whose ethnicity was classified as Other, had the highest rates, both at 1.5%.

County-level findings for marijuana are presented in Table H3. Most counties had lifetime prevalence rates below 10%, with two exceptions: Salem (11.1%) and Cumberland (10.2%). Five counties had low 30-day rates, all below 2%: Middlesex, Morris, Somerset, Union, and Warren. Relative to the other counties, three counties had elevated past 30-day rates: Cumberland (5.7%), Monmouth (5.4%), and Salem (5.6%).

Table 19. Lifetime, annual, and 30-day prevalence of use for marijuana, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,646	6.4	14,440	4.9	14,335	2.9
Grade						
7th	7,157	3.3	7,060	2.2	6,998	1.3
8th	7,139	9.7	7,040	7.8	7,010	4.7
Sex						
Female	7,581	5.3	7,496	4.2	7,434	2.5
Male	6,915	7.6	6,797	5.8	6,749	3.4
Ethnicity						
White	7,770	5.9	7,703	4.7	7,662	2.8
African American	2,115	6.8	2,056	4.6	2,041	2.7
Latino	1,876	8.3	1,843	6.5	1,827	3.5
Asian	765	1.8	761	1.1	755	0.8
Other	570	6.0	559	4.9	551	3.3
Multiple	1,371	9.6	1,346	7.0	1,329	4.7

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 20. Frequency of marijuana use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	14,335	97.1	2.9	1.5	0.5	0.9
Grade						
7th	6,998	98.7	1.3	0.8	0.1	0.4
8th	7,010	95.3	4.7	2.2	1.0	1.5
Sex						
Female	7,434	97.5	2.5	1.3	0.6	0.6
Male	6,749	96.6	3.4	1.6	0.5	1.3
Ethnicity						
White	7,662	97.2	2.8	1.5	0.4	0.9
African American	2,041	97.3	2.7	1.0	0.6	1.1
Latino	1,827	96.5	3.5	1.7	0.8	1.0
Asian	755	99.2	0.8	0.3	0.1	0.4
Other	551	96.7	3.3	1.3	0.5	1.5
Multiple	1,329	95.3	4.7	2.6	1.1	0.9

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

## ***Inhalants***

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Inhalant use is more prevalent with younger students, perhaps because it is often the easiest drug for them to obtain. Inhalant use typically peaks in middle school years and decreases throughout high school. The negative consequences of inhalant use can be substantial; one of them being that it is associated with the use of other illicit drugs later in life.

Inhalant use was measured for lifetime, annual, and 30-day prevalence periods 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 cautiously because there are differences in survey questions for this class of drugs.

After alcohol and tobacco, inhalants were the most commonly used illicit drug for New Jersey middle school students (see Tables 21 and 22). Overall, 9.1% of New Jersey middle school students reported using inhalants sometime in their lifetime. The rates for annual and 30-day use were 4.9% and 2.9%, respectively. Inhalant use doesn’t regularly increase by grade level, as is the case for other drugs. To wit, 9.4% of 8<sup>th</sup> graders said they had used inhalants sometime in their lifetime, but almost as many 7<sup>th</sup> graders, 8.8%, reported inhalant use in their lifetime. There was virtually no difference between 7<sup>th</sup> and 8<sup>th</sup> graders in 30-day use (3.0% and 2.7%, respectively).

There were no meaningful differences in inhalant use between boys and girls. There were some variations in prevalence among the ethnic groups, with African American and Asian students showing the lowest levels of current use. For example, only 1.9% of African American students reported inhalant use in the past 30 days. Students in the Other and Multiple ethnic categories had rates more than twice as high, at 4.5% and 4.3%, respectively.

Table 22 shows the frequency of inhalant use in the past 30 days. The frequency data were obtained from the 2.9% of students who reported that they had used inhalants in this time period. Among these students, inhalants were most often used 1-2 times in the past month. There was little variation in frequency of use by grade, gender, or ethnicity. Across all demographic subgroups, the frequency of use reported most often was 1-2 times in the past 30 days. Except for students categorized as Multiple, the percentage of students reporting use six or more times in the past 30 days varied between 0.5% and 0.7%. For Multiple students, this higher frequency of use rate jumped slightly to 1.2%.

County-level inhalant use findings are presented in Table H3. There were significant variations in both lifetime and past 30-day prevalence rates among the counties. For example, Burlington (15.3%) and Middlesex (12.1%) Counties reported the highest rates for lifetime prevalence. The lowest rates were reported by Cape May (5.2%), Camden (5.7%) and Morris (5.7%) Counties. There were similar findings for past 30-day use. In this case, the lowest rates were reported by Cape May (0.9%), Camden (1.9%) and Warren (1.9%) Counties. The highest rates were found in Burlington (3.9%), Middlesex (4.0%) and Union (3.9%) Counties.

Table 21. Lifetime, annual, and 30-day prevalence of use for inhalants, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,507	9.1	14,382	4.9	14,336	2.9
Grade						
7th	7,094	8.8	7,031	4.9	7,019	3.0
8th	7,079	9.4	7,014	5.0	6,988	2.7
Sex						
Female	7,492	9.1	7,459	5.1	7,444	3.0
Male	6,866	9.0	6,772	4.8	6,748	2.7
Ethnicity						
White	7,698	9.3	7,666	4.9	7,658	2.7
African American	2,097	5.1	2,053	2.2	2,036	1.9
Latino	1,851	10.5	1,835	5.5	1,823	3.1
Asian	764	10.4	761	5.7	760	2.5
Other	565	11.5	549	6.7	550	4.5
Multiple	1,356	10.7	1,342	7.1	1,334	4.3

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 22. Frequency of inhalant use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	14,336	97.1	2.9	1.8	0.4	0.7
Grade						
7th	7,019	97.0	3.0	1.9	0.3	0.8
8th	6,988	97.3	2.7	1.8	0.4	0.6
Sex						
Female	7,444	97.0	3.0	2.1	0.3	0.6
Male	6,748	97.3	2.7	1.5	0.5	0.7
Ethnicity						
White	7,658	97.3	2.7	1.6	0.4	0.6
African American	2,036	98.1	1.9	1.2	0.1	0.6
Latino	1,823	96.9	3.1	2.1	0.5	0.5
Asian	760	97.5	2.5	2.0	0.0	0.5
Other	550	95.5	4.5	3.1	0.7	0.7
Multiple	1,334	95.7	4.3	2.7	0.4	1.2

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

## ***Other Illicit Drugs***

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The *2001 New Jersey Middle School Survey* also measured the prevalence of use for a variety of other illicit drugs among New Jersey middle school students. This includes student use of the following: hallucinogens, club drugs, cocaine and crack (asked as a single question), heroin, and “other illicit drugs.” Results for these illicit drugs are presented on Tables 23 through 34.

The rates for prevalence of use of these other illicit drugs are much lower than the rates for alcohol, tobacco, marijuana, and inhalants. Lower levels of use (10% or less) for these other illicit drugs are typical of adolescent populations. Use tends to be quite low among middle school students, and is instead normally concentrated in the upper grade levels.

### **Hallucinogens**

Hallucinogen use was quite low for New Jersey middle school students (see Tables 23 and 24). Overall, 0.8% of students reported hallucinogen use in their lifetime, and 0.6% and 0.4% reported annual and past 30-day use, respectively. These rates have all decreased by about half compared to those measured in the 1999 New Jersey middle school survey. Because the overall prevalence rate is so low, the observed variations among the demographic subgroups are also quite small, a difference of less than 0.7% between any two demographic subgroups. An isolated exception is for students categorized as Other in ethnicity. For the annual prevalence period, 2% of these students reported hallucinogen use. This finding is higher than the 1.3% lifetime hallucinogen rate for the Other ethnic category and should probably not be considered credible.

### **Club Drugs**

The other illicit drug use most frequently reported by New Jersey middle school students was “club drugs.” For the purposes of the *2001 New Jersey Middle School Survey*, club drugs were defined as, “drugs like Ecstasy, GHB, Rohypnol<sup>®</sup>, ketamine or methamphetamine....” Overall, 2.4% of the students in New Jersey middle schools reported using club drugs at least once in their lifetimes (see Table 25). However, only 0.9% of New Jersey middle school students reported that they had used club drugs in the past 30 days.

As can also be seen on Table 25, older students in New Jersey are experimenting with club drugs at slightly higher rates: 3.3% of 8<sup>th</sup> graders reported use of club drugs in their lifetimes, compared to 1.5% of 7<sup>th</sup> graders. There were some ethnic variations also. Students categorized as Other and Multiple reported lifetime prevalence rates of 3.5% and 3.6%, respectively. Use for the past 30 days was found to be 1.9% and 1.1% for the Other and Multiple groups, respectively. Latino students reported club drug use of 2.7% for the lifetime period, and of 1.2% for the past 30 days. African American and Asian students had lower rates, both 1.5% for the lifetime period, and 0.7% and 0.5%, respectively, for the past 30 days.

## Cocaine or Crack

Overall, 1.2% of New Jersey middle school students reported use of cocaine or crack in their lifetimes (see Tables 27 and 28). Only 0.4% reported use in the past 30 days. The 8<sup>th</sup> grade students reported consistently higher rates than 7<sup>th</sup> grade students, but differences were quite small. There were insignificant differences between males and females. Among the ethnic groups, the lifetime rates ranged from a low of 0.7% for Asians, to a high of 2.0% for the Multiple category. The 30-day prevalence rate ranged from a low of 0.0% for Asians to a high of 1.0% for Multiple students.

## Heroin

The results for heroin use are summarized on Tables 29 and 30. Overall, only 0.8% of New Jersey middle school students reported heroin use in their lifetimes, and only 0.2% reported heroin use in the past 30 days. With such low rates, there was little variation among demographic subgroups. As usual, 8<sup>th</sup> graders reported slightly higher rates than 7<sup>th</sup> graders, but there was no meaningful difference between males and females. Among different ethnic groups, there was only a 0.8% difference between the highest group (Latino, 1.3%) and the lowest group (Asian, 0.5%). Even smaller variations were observed in the annual prevalence and past 30-day prevalence figures.

## Other Illicit Drugs

Approximately 3% of students reported the use of “any other illicit” drug in their lifetime (see Table 31), and about 1.1% reported use in the past 30 days (see Table 32). This question was worded as follows: “On how many occasions (if any) have you used other illegal drugs that haven’t been mentioned on this survey?” This question thus presents an opportunity to capture prevalence data on a wide variety of other possible drugs.

Heavier lifetime use was reported by 8<sup>th</sup> graders (4.4%) than by 7<sup>th</sup> graders (1.8%). There were no significant differences between males and females. There were some differences among the ethnic groups. The lifetime prevalence rate for students categorized as Multiple was 5.1%. The lowest lifetime rate for any ethnic group was for Asian, at 1.3%. This pattern was replicated for the 30-day prevalence period. The highest rate was reported for Multiple students, and the Asian and Other students reported low-end rates of 0.7% and 0.6%, respectively.

County-level findings are presented in Table H3. Two counties reported the highest lifetime and past 30-day prevalence rates. Essex had lifetime and past 30-day prevalence rates of 5.7% and 2.0%, respectively. Salem County had lifetime and past 30-day rates of 4.6% and 2.5%, respectively. Two counties, Cape May and Morris, had very low rates for both lifetime and past 30-day use.

## Any Illicit Drug

Finally, Tables 33 and 34 present information on any illicit drug use. This is a combined category, and includes students who reported use of any of the following: marijuana, inhalants, club drugs, hallucinogens, heroin, cocaine, or “other illegal drugs.” Combining all categories results in an estimated lifetime prevalence of 15.6% for New Jersey middle school students. In other words, 15.6% percent of 7<sup>th</sup> and 8<sup>th</sup> graders have used at least one of these drugs in their lifetimes. The 30-day prevalence rate drops to a much lower level, 6.3%.

As would be expected, 8<sup>th</sup> grade students reported somewhat higher prevalence rates than 7<sup>th</sup> graders. For example, 19.0% of 8<sup>th</sup> graders reported any illicit drug use in their lifetime, compared to 12.4% of 7<sup>th</sup> graders. A similar pattern is found for 8<sup>th</sup> and 7<sup>th</sup> grade past 30-day use, which was 8.0% and 4.7%, respectively. There were small variations between males and females, and slightly larger variations among ethnic categories as well.

For example, 20.5% of students classified as Multiple reported any illicit drug use in their lifetime, and 10.7% reported use in the past 30 days. The lowest lifetime and past 30-day rates were reported by Asian students (11.8% and 4.2%, respectively) and by African American students (13.8% and 5.2%, respectively). The rates for the remaining ethnic categories all fell between these two extremes.

County-level findings are presented in Table H3. Relative to the other counties, three counties had elevated lifetime rates: Burlington (22.3%), Cumberland (20.3%) and Salem (20.3%). Past 30-day rates were most elevated in Salem County (9.5%) and Essex County (8.6%).

Table 23. Lifetime, annual, and 30-day prevalence of use for hallucinogens, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,565	0.8	14,376	0.6	14,351	0.4
Grade						
7th	7,126	0.4	7,033	0.5	7,015	0.2
8th	7,100	1.1	7,001	0.8	6,994	0.6
Sex						
Female	7,537	0.5	7,467	0.4	7,448	0.3
Male	6,878	1.0	6,757	0.9	6,759	0.6
Ethnicity						
White	7,733	0.7	7,672	0.6	7,666	0.4
African American	2,102	0.7	2,058	0.5	2,044	0.4
Latino	1,865	0.9	1,821	0.5	1,834	0.4
Asian	766	0.6	761	0.6	760	0.4
Other	560	1.3	554	2.0	547	0.7
Multiple	1,359	1.0	1,341	0.7	1,335	0.7

Notes: “N” represents the total number of students who provided a valid response to the survey questions.  
“%” represents the percentage of the total number of students who reported that they have used the drug.

Table 24. Frequency of hallucinogen use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	14,351	99.6	0.4	0.2	0.1	0.1
<b>Grade</b>						
7th	7,015	99.8	0.2	0.1	0.0	0.1
8th	6,994	99.4	0.6	0.3	0.1	0.2
<b>Sex</b>						
Female	7,448	99.7	0.3	0.2	0.0	0.0
Male	6,759	99.4	0.6	0.2	0.1	0.3
<b>Ethnicity</b>						
White	7,666	99.6	0.4	0.2	0.0	0.1
African American	2,044	99.6	0.4	0.1	0.0	0.3
Latino	1,834	99.6	0.4	0.2	0.1	0.1
Asian	760	99.6	0.4	0.1	0.0	0.3
Other	547	99.3	0.7	0.7	0.0	0.0
Multiple	1,335	99.3	0.7	0.3	0.2	0.2

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 25. Lifetime, annual, and 30-day prevalence of use for club drugs, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,255	2.4	14,052	1.5	14,021	0.9
Grade						
7th	6,956	1.5	6,841	0.9	6,827	0.7
8th	6,970	3.3	6,888	2.0	6,869	1.2
Sex						
Female	7,427	2.1	7,336	1.4	7,338	0.8
Male	6,681	2.6	6,568	1.5	6,541	1.1
Ethnicity						
White	7,602	2.3	7,539	1.5	7,521	0.8
African American	2,066	1.5	2,019	0.8	2,003	0.7
Latino	1,805	2.7	1,773	2.0	1,774	1.2
Asian	746	1.5	731	0.9	736	0.5
Other	538	3.5	525	2.9	517	1.9
Multiple	1,328	3.6	1,301	1.2	1,305	1.1

Notes: “N” represents the total number of students who provided a valid response to the survey questions.  
“%” represents the percentage of the total number of students who reported that they have used the drug.

Table 26. Frequency of club drug use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	14,021	99.1	0.9	0.6	0.1	0.2
Grade						
7th	6,827	99.3	0.7	0.5	0.1	0.1
8th	6,869	98.8	1.2	0.7	0.1	0.3
Sex						
Female	7,338	99.2	0.8	0.4	0.1	0.3
Male	6,541	98.9	1.1	0.8	0.2	0.1
Ethnicity						
White	7,521	99.2	0.8	0.6	0.2	0.1
African American	2,003	99.3	0.7	0.6	0.0	0.1
Latino	1,774	98.8	1.2	0.6	0.0	0.6
Asian	736	99.5	0.5	0.1	0.0	0.4
Other	517	98.1	1.9	1.9	0.0	0.0
Multiple	1,305	98.9	1.1	0.4	0.2	0.5

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 27. Lifetime, annual, and 30-day prevalence of use for cocaine or crack, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,234	1.2	14,009	0.7	13,964	0.4
Grade						
7th	6,960	0.8	6,830	0.4	6,813	0.3
8th	6,962	1.7	6,865	1.0	6,843	0.5
Sex						
Female	7,419	1.0	7,334	0.6	7,307	0.3
Male	6,667	1.3	6,531	0.7	6,509	0.4
Ethnicity						
White	7,591	1.1	7,508	0.7	7,484	0.3
African American	2,059	1.3	1,998	0.5	2,000	0.5
Latino	1,806	1.4	1,773	0.9	1,761	0.7
Asian	746	0.7	739	0.5	736	0.0
Other	538	0.8	522	0.5	519	0.2
Multiple	1,324	2.0	1,301	1.3	1,297	1.0

Notes: “N” represents the total number of students who provided a valid response to the survey questions.  
“%” represents the percentage of the total number of students who reported that they have used the drug.

Table 28. Frequency of cocaine or crack use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	13,964	99.6	0.4	0.2	0.1	0.1
Grade						
7th	6,813	99.7	0.3	0.1	0.0	0.1
8th	6,843	99.5	0.5	0.3	0.1	0.1
Sex						
Female	7,307	99.7	0.3	0.2	0.1	0.1
Male	6,509	99.6	0.4	0.2	0.1	0.0
Ethnicity						
White	7,484	99.7	0.3	0.2	0.1	0.0
African American	2,000	99.6	0.5	0.1	0.0	0.4
Latino	1,761	99.3	0.7	0.3	0.3	0.2
Asian	736	100.0	0.0	0.0	0.0	0.0
Other	519	99.8	0.2	0.2	0.0	0.0
Multiple	1,297	99.0	1.0	0.5	0.0	0.5

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 29. Lifetime, annual, and 30-day prevalence of use for heroin, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,119	0.8	13,861	0.5	13,842	0.2
Grade						
7th	6,911	0.4	6,769	0.2	6,749	0.1
8th	6,909	1.1	6,803	0.7	6,799	0.3
Sex						
Female	7,362	0.8	7,261	0.4	7,264	0.2
Male	6,613	0.7	6,460	0.5	6,432	0.2
Ethnicity						
White	7,527	0.7	7,444	0.4	7,422	0.2
African American	2,036	0.7	1,959	0.1	1,962	0.2
Latino	1,789	1.3	1,749	0.9	1,748	0.3
Asian	745	0.5	738	0.3	736	0.3
Other	534	0.6	514	0.3	520	0.0
Multiple	1,319	1.1	1,294	0.8	1,289	0.7

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 30. Frequency of heroin use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	13,842	99.8	0.2	0.2	0.0	0.0
<b>Grade</b>						
7th	6,749	99.9	0.1	0.1	0.0	0.0
8th	6,799	99.7	0.3	0.3	0.0	0.0
<b>Sex</b>						
Female	7,264	99.8	0.2	0.2	0.0	0.0
Male	6,432	99.8	0.2	0.1	0.0	0.1
<b>Ethnicity</b>						
White	7,422	99.8	0.2	0.1	0.0	0.0
African American	1,962	99.8	0.2	0.1	0.1	0.0
Latino	1,748	99.7	0.3	0.1	0.1	0.2
Asian	736	99.7	0.3	0.3	0.0	0.0
Other	520	100.0	0.0	0.0	0.0	0.0
Multiple	1,289	99.3	0.7	0.5	0.0	0.2

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 31. Lifetime, annual, and 30-day prevalence of use for other illicit drugs, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,107	3.1	13,883	2.0	13,830	1.1
Grade						
7th	6,902	1.8	6,780	1.2	6,754	0.5
8th	6,911	4.4	6,817	2.9	6,789	1.7
Sex						
Female	7,352	3.0	7,275	2.2	7,258	1.3
Male	6,612	3.2	6,464	1.9	6,434	0.9
Ethnicity						
White	7,518	2.5	7,438	1.8	7,424	0.8
African American	2,033	4.0	1,988	2.2	1,968	1.1
Latino	1,787	4.1	1,748	3.2	1,739	2.0
Asian	745	1.3	736	0.6	734	0.7
Other	533	3.0	516	1.5	513	0.6
Multiple	1,321	5.1	1,293	2.9	1,287	2.3

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 32. Frequency of other illicit drug use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any	1-2	3-5	6+
		%	%	%	%	%
Overall	13,830	98.9	1.1	0.8	0.2	0.2
Grade						
7th	6,754	99.5	0.5	0.4	0.1	0.1
8th	6,789	98.3	1.7	1.1	0.2	0.3
Sex						
Female	7,258	98.7	1.3	0.9	0.2	0.2
Male	6,434	99.1	0.9	0.6	0.1	0.2
Ethnicity						
White	7,424	99.2	0.8	0.6	0.1	0.1
African American	1,968	98.9	1.1	0.9	0.0	0.2
Latino	1,739	98.0	2.0	1.3	0.3	0.4
Asian	734	99.3	0.7	0.7	0.0	0.0
Other	513	99.4	0.6	0.2	0.0	0.4
Multiple	1,287	97.7	2.3	1.2	0.4	0.6

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The two prevalence categories (“Never” and “Any”) sum to 100% and represent the total number of valid cases for the survey question. The three “Number of Occasions” categories sum to the “Any” category.

Table 33. Lifetime, annual, and 30-day prevalence of use for any illicit drug, by selected demographic characteristics, 2001.

	Lifetime		Annual		30-Day	
	N	%	N	%	N	%
Overall	14,740	15.6	14,581	10.2	14,568	6.3
Grade						
7th	7,218	12.4	7,130	7.6	7,120	4.7
8th	7,169	19.0	7,100	13.0	7,108	8.0
Sex						
Female	7,624	14.1	7,564	9.6	7,561	6.1
Male	6,964	17.0	6,861	10.8	6,861	6.6
Ethnicity						
White	7,812	14.6	7,757	9.5	7,755	5.6
African American	2,137	13.8	2,081	8.1	2,088	5.2
Latino	1,888	18.9	1,871	12.7	1,870	7.9
Asian	767	11.8	764	7.1	766	4.2
Other	573	19.7	560	13.2	562	8.4
Multiple	1,383	20.5	1,368	15.0	1,364	10.7

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 34. Frequency of any illicit drug use during the past 30 days, by selected demographic characteristics, 2001.

	Valid N	Any Illicit Drug Use	
		Never	Yes
		%	%
Overall	14,568	93.7	6.3
<b>Grade</b>			
7th	7,120	95.3	4.7
8th	7,108	92.0	8.0
<b>Sex</b>			
Female	7,561	93.9	6.1
Male	6,861	93.4	6.6
<b>Ethnicity</b>			
White	7,755	94.4	5.6
African American	2,088	94.8	5.2
Latino	1,870	92.1	7.9
Asian	766	95.8	4.2
Other	562	91.6	8.4
Multiple	1,364	89.3	10.7

Notes: “Valid N” represents the number of students who provided a response within each response category. “%” represents the percentage of the total number of students within each response category. The “Number of Occasions” frequencies are not reported because of uncertainty in combining frequency.

## Other Antisocial Behaviors

The *2001 New Jersey Middle School Survey* also measures a series of eight other problem or antisocial behaviors—that is, behaviors that run counter to established norms of good behavior. Note that information on antisocial behavior is collected only for a prevalence period of the past 12 months. The antisocial behaviors measured on the survey include the following:

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

Each question is specifically described below. Note that for all eight questions, possible responses include: Never, 1 to 2 times, 3 to 5 times and 6+ times.

Table 35 summarizes the prevalence rates of all of the delinquent behaviors for 7<sup>th</sup> and 8<sup>th</sup> grade students for the 1999 and 2001 surveys. While not as dramatic as those for ATODs, the 2001 results show a consistent, slight downward trend in the prevalence of most of these behaviors. Tables 36 through 43 provide specific information by grade, sex, and ethnicity, as well as information on frequency, for each of the antisocial behaviors. However, for many of the measured behaviors, only a small proportion of middle school students in New Jersey reported that they had engaged in them. The two exceptions are “Attacking Someone with Intent to Harm” and “Getting Suspended.” Furthermore, given the small proportion of students that exhibited an antisocial act, differences by grade, sex, and ethnicity are difficult to interpret. However, consistent differences between boys and girls were found, with boys reporting these behaviors more often—the one exception being that more girls reported “Being Drunk or High at School.”

### Attacking Someone with Intent to Harm

The question “How many times in the past year (12 months) have you attacked someone with the idea of seriously hurting them?” was asked in the survey. The question does not ask specifically about the use of a weapon; therefore, occurrences of physical fighting without weapons are captured with this question.

This question typically elicits one of the highest prevalence rates among all of the antisocial behaviors. In fact, this behavior is the second most prevalent delinquent behavior for middle school students in New Jersey middle schools. Overall, 14.1% of surveyed students reported having attacked someone with the intent to harm them in the past year (see Table 36). Involvement in this behavior varies between the sexes with almost twice as many male students

reporting involvement (18.0% of boys versus 10.5% of girls). There were also significant variations among the ethnic groups. African American students reported the highest prevalence of engaging in this behavior (21.5%), while Asian students reported the lowest prevalence rate (8.4%).

Of those students who reported engaging in this behavior, the vast majority (69.5%) reported only 1-2 occasions. For all New Jersey middle school students, 9.8% reported 1-2 occasions, 1.9% reported 3-5 occasions, and 2.5% reported 6 or more occasions. This pattern—most students reporting only 1-2 occasions—was repeated for all demographic subgroups.

County-level results are presented for this delinquent behavior in Table H5. County-level rates range from a low of 7.5% (Cape May County) to a high of 21.6% (Essex County). This variation may have more to do with the selection of schools within counties than with general student behavior.

## **Attempting to Steal a Vehicle**

Vehicle theft is captured 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?”

In New Jersey, 1.7% of surveyed middle school students reported having stolen, or attempted to steal, a motor vehicle in the past year (see Table 37). Findings are fairly even across both participating grades, with rates increasing slightly from 7<sup>th</sup> to 8<sup>th</sup> grade. The typical predominance of this behavior is among boys.

Because of the low overall prevalence rate, there is little variation evident among ethnic groups. Students classified as African American and Multiple reported the highest rates, both 3.0%, while Asian and White students reported the lowest rates, at 0.9% and 1.2%, respectively.

## **Being Arrested**

Any student experience with being arrested is captured 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 youth 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.

In New Jersey, 3.9% of surveyed middle school students reported having been arrested in the past year. Table 38 reveals that rates increase as students get older, with the prevalence ranging from 2.9% in the 7<sup>th</sup> grade to 4.9% in the 8<sup>th</sup> grade. African American students had the highest rate among the ethnic groups (6.3%), followed by Latino (5.7%) and Multiple (5.2%). Asian students reported the lowest rate (0.9%).

Of those students reporting an arrest in the past year, a large majority (84.6%) reported 1-2 occasions. Overall, 3.3% of New Jersey middle school students reported 1-2 arrest events in the

past year, and 0.3% reported 3-5 arrests or 6 or more arrests. This pattern of very few students reporting a high number of arrests was true for all demographic subgroups.

County-level findings showed limited variation among the counties (see Table H5). Rates as low as 0.5% and 1.2% were observed in Morris and Cape May Counties, respectively. The highest rates were 8.3% and 7.0% in Essex and Cumberland Counties, respectively.

## **Being Drunk or High at School**

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

In New Jersey, 4.4% of surveyed middle school students reported having been drunk or high at school in the past year. Table 39 reveals an increase in participation in this behavior as students get older. Specifically, 3.4% of 7<sup>th</sup> graders indicated having been drunk or high at school compared to 5.6% of the 8<sup>th</sup> graders. There were no meaningful differences between males and females. Students classified as Latino, Other, and Multiple reported rates of 6.8%, 6.6%, and 6.1%, respectively. This is more than three times the rate for Asian students, which was 2.0%.

A total of 10 counties reported prevalence rates for this behavior in the 5.3-6.6% range (See Table H5). Only two counties had rates lower than 2%: Morris (1.0%) and Cape May (1.8%).

## **Carrying a Handgun**

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

In New Jersey, 1.8% of surveyed middle school students reported having carried a handgun in the past year. Table 40 illustrates that a small proportion of students in New Jersey indicated involvement in this behavior, across both grade levels and all ethnic groups. Males (2.6%), African Americans (3.2%), and Latino students (3.0%) were slightly more likely to report this behavior compared to their counterparts.

## **Getting Suspended**

Suspension is captured 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. It should also be noted that school suspension rates are difficult to interpret because school suspension policies vary substantially from district to district. Therefore, these rates should be interpreted with caution. Often, however, differences by grade, sex, and ethnicity are interesting, as changes in these rates are revealed over time.

The results for school suspension are presented in Table 41. In New Jersey, 14.3% of surveyed middle school students reported having been suspended in the past year. Looking at Table 41, it appears that rates are fairly consistent across the two grade levels. However, findings for the sexes differ, with nearly twice as many males reporting that they have been suspended from school than females (18.8% versus 10.1%, respectively).

There are also wide disparities in suspension rates among ethnic groups. Suspension rates were lowest among Asians (4.4%) and Whites (6.7%), and were highest among African American (37.1%), Multiple (18.5%), Other (18.3%), and Latino (17.8%) subgroups.

There was wide variation in county-level suspension rates. One county had much higher rates than all other counties: Essex (46.4%). The next highest county was Atlantic, at 27.5%. The remaining counties had rates of 17.2% or lower, with 10 counties having rates below 10%.

## **Selling Drugs**

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

In New Jersey, only 1.4% of surveyed middle school students reported having sold illicit drugs in the past year. As can be seen on Table 42, 2.2% of 8<sup>th</sup> grade students in New Jersey sold illicit drugs compared to 0.6% of 7<sup>th</sup> graders. There was a difference between males and females, (1.9% vs. 0.9%, respectively) in selling drugs. There were also small differences among the various ethnic groups. No group was higher than 2.1%, and Asians reported the lowest rate, 0.1%.

## **Taking a Handgun to School**

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

In New Jersey, 0.4% of surveyed middle school students reported having taken a handgun to school in the past year. Rates of involvement are very low across all subpopulations. Essentially, the prevalence of this behavior among New Jersey middle school students is so low that the measured prevalence value should be regarded as unreliable (see Table 43).

Table 35. Summary of the prevalence of delinquent behaviors for New Jersey middle school students, from surveys conducted in 1999 and 2001.

	1999 Survey						2001 Survey					
	7th		8th		Overall		7th		8th		Overall	
	N	%	N	%	N	%	N	%	N	%	N	%
Attacking Someone with Intent to Harm	4,508	12.1	4,007	15.4	8,515	13.8	7,697	12.8	7,395	15.9	15,490	14.1
Attempting to Steal a Vehicle	4,508	2.2	4,007	3.5	8,515	2.8	7,732	1.5	7,406	2.1	15,539	1.7
Being Arrested	4,507	2.8	4,007	5.5	8,514	4.1	7,682	2.9	7,372	4.9	15,452	3.9
Being Drunk or High at School	4,508	4.7	4,007	8.4	8,515	6.5	7,703	3.4	7,397	5.6	15,505	4.4
Carrying a Handgun	4,507	2.8	4,006	2.9	8,513	2.8	7,721	1.3	7,412	2.2	15,532	1.8
Getting Suspended	4,508	10.9	4,007	13.2	8,515	12.0	7,750	13.9	7,428	15.1	15,578	14.3
Selling Drugs	4,507	1.5	4,007	4.5	8,514	3.0	7,664	0.6	7,351	2.2	15,412	1.4
Taking a Handgun to School	4,507	0.3	4,007	1.6	8,514	0.9	7,728	0.3	7,396	0.6	15,913	0.4

Note: 1999 survey results are reported in “The 1999 New Jersey Middle School Survey: A Statewide Report” (p. 18). The 1999 “Overall N” is the combination of students who indicated they were in the 7th or 8th grade. The 2001 “Overall N” includes students who did not indicate a grade level.

Table 36. Frequency of Attacking Someone with Intent to Harm during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,490	85.9	14.1	9.8	1.9	2.5
Grade						
7th	7,697	87.2	12.8	8.9	1.8	2.1
8th	7,395	84.1	15.9	11.0	2.1	2.9
Sex						
Female	7,968	89.5	10.5	7.5	1.2	1.8
Male	7,355	82.0	18.0	12.3	2.6	3.1
Ethnicity						
White	8,097	89.2	10.8	7.4	1.4	2.0
African American	2,297	78.5	21.5	16.0	2.7	2.8
Latino	2,043	83.9	16.1	10.7	2.4	3.0
Asian	794	91.6	8.4	6.5	0.6	1.3
Other	581	84.0	16.0	10.7	2.1	3.3
Multiple	1,493	80.2	19.8	12.9	3.1	3.8

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

Table 37. Frequency of Attempting to Steal a Vehicle during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,539	98.3	1.7	1.1	0.1	0.5
Grade						
7th	7,732	98.5	1.5	1.0	0.2	0.3
8th	7,406	97.9	2.1	1.2	0.1	0.7
Sex						
Female	7,986	98.9	1.1	0.8	0.1	0.2
Male	7,388	97.6	2.4	1.5	0.2	0.7
Ethnicity						
White	8,113	98.8	1.2	0.9	0.1	0.3
African American	2,304	97.0	3.0	1.6	0.4	1.0
Latino	2,050	98.1	1.9	0.8	0.2	0.8
Asian	796	99.1	0.9	0.5	0.0	0.4
Other	589	98.6	1.4	0.8	0.2	0.3
Multiple	1,501	97.0	3.0	2.5	0.1	0.4

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

Table 38. Frequency of Being Arrested during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,452	96.1	3.9	3.3	0.3	0.3
Grade						
7th	7,682	97.1	2.9	2.5	0.2	0.1
8th	7,372	95.1	4.9	4.2	0.4	0.4
Sex						
Female	7,949	97.8	2.2	2.0	0.1	0.1
Male	7,337	94.4	5.6	4.7	0.5	0.4
Ethnicity						
White	8,084	97.1	2.9	2.4	0.3	0.3
African American	2,283	93.7	6.3	5.5	0.4	0.4
Latino	2,036	94.3	5.7	5.2	0.3	0.1
Asian	788	99.1	0.9	0.6	0.0	0.3
Other	586	97.3	2.7	2.2	0.3	0.2
Multiple	1,488	94.8	5.2	4.0	0.5	0.6

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

Table 39. Frequency of Being Drunk or High at School during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,505	95.6	4.4	2.9	0.7	0.8
Grade						
7th	7,703	96.6	3.4	2.5	0.5	0.5
8th	7,397	94.4	5.6	3.5	0.9	1.2
Sex						
Female	7,969	95.3	4.7	3.2	0.7	0.9
Male	7,371	95.9	4.1	2.6	0.7	0.8
Ethnicity						
White	8,090	96.4	3.6	2.4	0.5	0.7
African American	2,305	95.7	4.3	3.4	0.8	0.1
Latino	2,039	93.2	6.8	3.8	1.1	1.8
Asian	792	98.0	2.0	1.4	0.4	0.3
Other	588	93.4	6.6	5.4	1.0	0.2
Multiple	1,498	93.9	6.1	4.1	0.5	1.6

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

Table 40. Frequency of Carrying a Handgun during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,532	98.2	1.8	1.0	0.3	0.5
Grade						
7th	7,721	98.7	1.3	0.9	0.1	0.3
8th	7,412	97.8	2.2	1.1	0.5	0.7
Sex						
Female	7,988	99.0	1.0	0.6	0.0	0.3
Male	7,380	97.4	2.6	1.4	0.5	0.6
Ethnicity						
White	8,116	98.9	1.1	0.6	0.2	0.2
African American	2,306	96.8	3.2	2.0	0.5	0.7
Latino	2,044	97.0	3.0	1.8	0.3	0.9
Asian	796	99.1	0.9	0.6	0.0	0.3
Other	587	99.0	1.0	0.2	0.3	0.5
Multiple	1,496	97.7	2.3	1.1	0.3	0.9

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

Table 41. Frequency of Getting Suspended during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,578	85.7	14.3	10.2	2.5	1.5
Grade						
7th	7,750	86.1	13.9	9.8	2.7	1.4
8th	7,428	84.9	15.1	11.1	2.4	1.6
Sex						
Female	8,002	89.9	10.1	7.5	1.7	0.9
Male	7,410	81.2	18.8	13.1	3.5	2.2
Ethnicity						
White	8,117	93.3	6.7	5.2	0.9	0.5
African American	2,332	62.9	37.1	24.1	8.9	4.1
Latino	2,052	82.2	17.8	12.2	2.8	2.8
Asian	796	95.6	4.4	3.8	0.1	0.5
Other	590	81.7	18.3	13.7	3.6	1.0
Multiple	1,501	81.5	18.5	14.8	2.0	1.7

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

Table 42. Frequency of Selling Drugs during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,412	98.6	1.4	0.7	0.3	0.4
Grade						
7th	7,664	99.4	0.6	0.3	0.1	0.3
8th	7,351	97.8	2.2	1.3	0.5	0.5
Sex						
Female	7,920	99.1	0.9	0.5	0.3	0.2
Male	7,327	98.1	1.9	1.1	0.3	0.5
Ethnicity						
White	8,061	98.9	1.1	0.6	0.1	0.3
African American	2,282	98.2	1.8	1.2	0.4	0.3
Latino	2,022	97.9	2.1	1.0	0.4	0.6
Asian	789	99.9	0.1	0.0	0.0	0.1
Other	584	99.0	1.0	0.3	0.5	0.2
Multiple	1,483	97.9	2.1	1.1	0.5	0.5

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

Table 43. Frequency of Taking a Handgun to School during the past year, by selected demographic characteristics, 2001.

	Valid N	Prevalence		Number of Occasions		
		Never	Any Occasion	1-2	3-5	6+
		%	%	%	%	%
Overall	15,524	99.6	0.4	0.2	0.0	0.1
Grade						
7th	7,728	99.7	0.3	0.1	0.0	0.1
8th	7,396	99.4	0.6	0.4	0.1	0.1
Sex						
Female	7,975	99.9	0.1	0.0	0.0	0.1
Male	7,381	99.2	0.8	0.5	0.1	0.2
Ethnicity						
White	8,112	99.8	0.2	0.1	0.0	0.0
African American	2,301	98.9	1.1	0.7	0.0	0.4
Latino	2,044	99.3	0.7	0.3	0.1	0.3
Asian	795	99.9	0.1	0.1	0.0	0.0
Other	588	99.7	0.3	0.3	0.0	0.0
Multiple	1,498	99.4	0.6	0.2	0.3	0.1

Notes: “Valid N” represents the number of valid cases, by category, for a given survey item. The three “Number of Occasions” categories sum to the “Any Occasion” category.

## Special Topics

Several analyses were conducted to investigate ATOD results associated with the following topics: Age of Onset, Peer-to-Peer Schools, the relationship between ATOD use and the students' school grades, and the relationship between student attitudes toward ATOD substances and ATOD use.

### Age of Onset

Students were asked to report on when they began using alcohol, cigarettes, and marijuana. For example, the question related to cigarettes is: "How old were you when you first smoked a cigarette, even just a puff?" Two questions about alcohol are 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." Students were also asked about the age of onset for five delinquency outcomes: Attacking Someone with Intent to Harm, Being Arrested, Carrying a Handgun, Belonging to a Gang, and Getting Suspended.

Table 44 presents the average age students reported first engaging in any alcohol use, regular alcohol use, any use of cigarettes, and any use of marijuana. Table 45 presents the same information for selected delinquent behaviors. The average age is based only on those students who reported engaging in the behavior. That is, students who indicated that they had never engaged in the behavior are not included in the analysis.

As would be expected from a middle school survey, the average age of onset was relatively recent. An age of 11 corresponds roughly to 6<sup>th</sup> grade, and 12 and 13 to 7<sup>th</sup> and 8<sup>th</sup> grades, respectively. For all of the behaviors, the average age of onset fell into a narrow band ranging from a low of 11.4 years of age (cigarette use) to a high of 12.3 years (marijuana use) for ATOD-related behaviors. For the delinquent behaviors, the average age range is from 11.5 years for getting suspended to 12.1 years for being arrested.

There was no meaningful difference between males and females for age of onset for any of the ATOD or delinquent behaviors. The differences among the various ethnic groups were similarly small. For example, the youngest age of onset for regular alcohol use was 11.8 years for African American students, while the oldest age of onset was 12.3 years for White students. Similarly small differentials were found for the other behaviors.

Table 44. Average age of onset for alcohol, cigarette, and marijuana use, 2001.

	<b>First Use of Alcohol</b>		<b>Regular Alcohol Use</b>		<b>First Use of Cigarettes</b>		<b>First Use of Marijuana</b>	
	<b>N</b>		<b>N</b>		<b>N</b>		<b>N</b>	
Overall	6,637	11.5	1,337	12.2	4,041	11.4	959	12.3
Grade								
7th	2,757	11.2	393	11.7	1,555	11.1	231	11.8
8th	3,792	11.8	927	12.4	2,438	11.6	719	12.4
Sex								
Female	3,239	11.6	687	12.2	2,099	11.4	420	12.3
Male	3,321	11.5	635	12.1	1,888	11.4	528	12.2
Ethnicity								
White	3,372	11.5	553	12.3	1,815	11.5	408	12.3
African American	945	11.5	205	11.8	694	11.2	177	12.0
Latino	1,037	11.7	276	12.2	724	11.5	185	12.3
Asian	198	11.0	22	11.9	98	11.3	11	12.1
Other	256	11.6	71	12.2	175	11.3	33	12.5
Multiple	754	11.4	186	12.0	499	11.1	125	12.2

Notes: “N” represents the number of students who reported engaging in each behavior specifically on the “age of onset” survey items. Therefore, the reported number of valid cases for these items is different from those reported in earlier tables.

Table 45. Average age of onset for selected delinquent behaviors, 2001.

	<b>Attacked to Harm</b>		<b>Got Arrested</b>		<b>Carried Handgun</b>		<b>Belonged to Gang</b>		<b>Got Suspended</b>	
	<b>N</b>		<b>N</b>		<b>N</b>		<b>N</b>		<b>N</b>	
Overall	2,509	11.6	678	12.1	293	11.7	990	12.0	2,892	11.5
<b>Grade</b>										
7th	1,134	11.3	249	11.6	115	11.2	456	11.7	1,297	11.2
8th	1,341	11.9	420	12.4	172	12.1	509	12.3	1,559	11.8
<b>Sex</b>										
Female	926	11.8	202	12.2	59	12.3	412	12.1	1,037	11.6
Male	1,546	11.6	470	12.0	224	11.7	565	12.0	1,825	11.5
<b>Ethnicity</b>										
White	939	11.6	281	12.0	82	11.5	233	11.9	758	11.7
African American	594	11.6	147	12.1	85	11.6	309	12.0	1,064	11.3
Latino	401	11.7	123	12.2	65	12.0	204	12.3	475	11.6
Asian	68	11.5	12	11.2	6	11.3	23	11.5	53	11.5
Other	114	11.7	17	12.3	7	12.9	47	12.6	120	11.9
Multiple	352	11.6	89	12.1	44	12.0	150	11.8	384	11.5

Notes: “N” represents the number of students who reported engaging in each behavior specifically on the “age of onset” survey items. Therefore, the reported number of valid cases for these items is different from those reported in earlier tables.

## ATOD Use in Peer-to-Peer Schools

The Peer-to-Peer (PTP) school program is a specialized, school-based prevention program implemented in many New Jersey middle schools. PTP has 3 trained adult mentors, who work with 12-15 middle school peers to train them in leadership and prevention skills. The middle school peers outreach to their peers by teaching alcohol, tobacco and other drug lessons using a curriculum developed by Prevention Center and Prevention Unit staff. The “peer educators” outreach to their peers a minimum of 5 times, with 1 outreach to parents during the second half of the school year.

Survey results were analyzed by whether the data came from students enrolled in PTP schools or from students enrolled in schools identified as non-PTP. Table 46 shows the results of this analysis. The ATODs used in the analysis were limited to those most frequently used by students: alcohol, cigarettes, inhalants, and marijuana. The results show that students in Peer-to-Peer schools had slightly lower prevalence of use rates for all of the drugs than did students in non-Peer-to-Peer schools. In all cases, the differences were slight.

These results suggest that Peer-to-Peer schools may have some positive influence on student use of ATODs. However, other, competing explanations cannot be ruled out. For example, it is not known whether the Peer-to-Peer schools have students from higher or lower socio-economic strata, or whether Peer-to-Peer schools have staff with higher motivation with regard to student welfare. Alternatively, the small impact suggested could be that middle schools in PTP schools could have shown worse ATOD use had it not been for the program. Without more systematic study, these issues cannot be ruled out as contributing to—or explaining completely—the lower Peer-to-Peer schools’ prevalence rates.

Table 46. Prevalence rates for selected ATODs for Peer-to-Peer and non-Peer-to-Peer schools.

	Peer-to-Peer Schools		Non-Peer-to-Peer Schools		Total	
	Valid N	% Using	Valid N	% Using	Valid N	% Using
Alcohol, Lifetime	4,171	42.9	10,396	45.3	14,567	44.6
Alcohol, Annual	4,175	29.6	10,315	31.6	14,490	31.0
Alcohol, 30 Days	4,191	15.0	10,347	16.4	14,538	16.0
Alcohol, Binge Drinking	4,158	5.7	10,307	8.4	14,465	7.6
Cigarettes, Lifetime	4,292	21.5	10,632	26.7	14,923	25.2
Cigarettes, Annual	4,260	11.1	10,541	12.8	14,801	12.3
Cigarettes, 30 Days	4,230	6.7	10,369	7.5	14,599	7.2
Inhalants, Lifetime	4,143	8.3	10,364	9.4	14,507	9.1
Inhalants, Annual	4,119	4.6	10,263	5.1	14,382	4.9
Inhalants, 30 Days	4,112	2.6	10,224	3.0	14,336	2.9
Marijuana, Lifetime	4,197	5.8	10,449	6.7	14,646	6.4
Marijuana, Annual	4,163	4.6	10,277	5.1	14,440	4.9
Marijuana, 30 Days	4,119	2.7	10,216	3.0	14,335	2.9

Notes: “Valid N” represents the total number of students who provided a valid response to the survey questions.  
 “% Using” represents the percentage of the total number of students who reported that they have used the drugs.

## **ATOD Use and Its Relationship to Student Grades**

The past 30-day prevalence rates for alcohol, cigarettes, marijuana, and any illicit drug were examined in comparison with the students' self-reports of the previous year's grades. For purposes of this analysis, academic performance was assessed using the question: "Putting them all together, what were your grades like last year?" These data are presented in Table 47.

The data suggest a strong relationship between student academic performance and ATOD use. This is not surprising, because poor academic performance is known to correlate with the onset of ATOD use in adolescents (Hawkins, Catalano & Miller, 1992). Table 47 presents a rather striking relationship between the level of academic performance and ATOD use. For example, examining cigarette use, students at the lowest-performing academic level ("Mostly Fs") had ATOD use rates that were more than 12 times those of students in the highest academic performance level ("Mostly As"). For marijuana, the rate of use for students who reported grades of "Mostly Fs" was 17 times that of students who reported grades of "Mostly As."

## **ATOD Use and Its Relationship to Student Attitudes**

Table 48 shows the relationship between the past 30-day use of alcohol, cigarettes, marijuana, and any illegal drug, and the students' reports of how easy they believe it would be for them to obtain alcohol, cigarettes or marijuana. In all cases, students who reported that it would be very easy to obtain any of these drugs also reported higher levels of use. Perceived availability of ATOD substances is a known risk factor predictive of the later use of ATOD substances (Hawkins, Catalano, & Miller, 1992; Johnston, O'Malley, & Bachman, 1999, 2000, 2001). Thus, the data displayed in Table 48 are not surprising.

Of the students who thought it would be "Very Easy" to obtain alcohol, 37.4% reported the use of alcohol in the past 30 days. For students who thought it would be "Sort of Easy" to obtain alcohol, 26.2% had used alcohol in the past 30 days. For students who thought it would be "Very Hard" to obtain alcohol, only 5.5% reported past 30-day use. This pattern of results holds for all combinations of attitudes towards ease of obtaining a drug and the reported use of that drug.

Table 49 presents data on students' perceptions of the harmfulness of ATOD use. These attitudes are also known to correlate the onset of ATOD use (Hawkins, Catalano, & Miller, 1992). That is, students who believe that ATOD use is physically harmful or dangerous are less likely to engage in use than are students whose attitudes suggest that they perceive little possible harm from ATOD use. Table 49 shows the percentages of students from various demographic groups who have negative views (i.e., views that are generally opposed to drug use) regarding ATOD use.

For example, 62.1% of New Jersey middle school students reported that smoking a pack of cigarettes a day would cause a "great risk" of harm to them. An even higher percentage, 75.6%, believed that smoking marijuana regularly would cause a "great risk" of harm to them.

Students were less concerned with the regular use of alcohol, defined as drinking one or more drinks every day. Judging from the answers to this question, only 42.5% of the students believed that this would cause a “great risk” of harm.

There were no large differences among grade levels or between males and females on these attitude questions. Females were somewhat more likely to perceive great risks of harm in drinking alcohol and in smoking marijuana regularly. The 7<sup>th</sup> grade students also seemed to be somewhat more concerned with the negative effects of marijuana use than the 8<sup>th</sup> grade students (see Table 49).

There were significant differences among various ethnic groups. Asian students, in general, predict higher levels of harm resulting from drug use than do students in the other ethnic groups. For alcohol use, the distinction was quite striking. For Asian students, 63.8% perceived “great harm” from regular alcohol use. For all of the other ethnic categories, the percentages varied only slightly, from a low of 38.9% to a high of 42.1%. Lesser differences were found between Asian students and other ethnic groups for the other drugs.

We also investigated the relationship between how wrong it would be to use alcohol, cigarettes, marijuana, or other illicit drugs against the reported level of use. These data are presented in Table 50. The percentages shown on Table 50 are the percentages of students who thought it would be “wrong” or “very wrong” to use each drug.

Table 50 shows that students uniformly have negative attitudes towards the use of ATOD substances. Even for alcohol and cigarettes, the two drugs they are most likely to see adults use, disapproval ranged between 80.6% and 92.5% for all students, and for the specific demographic subgroups.

Students were also asked whether they would be seen as “cool” if they used alcohol regularly, smoked cigarettes or marijuana, or carried a gun. Consistent with the findings in Table 50, which show negative attitudes towards ATOD use, students did not see these behaviors as making them “cool” in the eyes of their peers. These data are shown in Table 51.

Out of all of the surveyed New Jersey middle school students, only about 6% thought they would be seen as cool if they drank alcohol regularly, smoked cigarettes, or smoked marijuana. An even lower percentage, about 5%, thought they would be seen as cool if they carried a gun. These percentages increased somewhat for 8<sup>th</sup> graders, as compared to 7<sup>th</sup> graders, but there were only insignificant differences between males and females.

There were some variations among ethnic groups. Asian students had the lowest percentages for the ATOD substances, never rising above 3.8%. The other ethnic groups varied between 5.5% and 9.4% on all of the ATOD substances. For carrying a gun, African American students had somewhat higher rates than the remaining ethnic groups, at 9.1%.

Table 47. Past 30-day prevalence of use rates for selected ATODs, by last year's grades in school, 2001.

Last Year's Grades	30-Day Prevalence							
	Alcohol		Cigarettes		Marijuana		Any Illegal Drug	
	N	%	N	%	N	%	N	%
Mostly As	4,886	10.8	4,894	2.3	4,838	1.2	4,903	3.6
Mostly Bs	5,471	17.5	5,505	6.8	5,409	2.8	5,490	6.2
Mostly Cs	2,745	19.2	2,758	12.7	2,670	4.1	2,735	8.5
Mostly Ds	507	24.4	503	17.5	500	8.0	508	12.3
Mostly Fs	169	28.8	178	28.8	166	20.5	169	25.9

Notes: "N" represents the total number of students who provided a valid response to the survey questions. "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 48. Past 30-day ATOD prevalence of use rates among New Jersey middle school students, controlling for attitudes toward ATOD availability.

How easy would it be for you to get ...		30-Day ATOD Use							
		Alcohol		Cigarettes		Marijuana		Any Illegal Drug	
		N	%	N	%	N	%	N	%
<b>Alcohol</b>	Very Easy	2,078	37.4	2,063	19.2	2,074	10.4	2,114	18.5
	Sort of Easy	2,525	26.2	2,510	10.7	2,526	4.2	2,559	8.9
	Sort of Hard	2,960	15.1	2,938	5.6	2,924	1.8	2,980	4.9
	Very Hard	6,139	5.5	6,087	2.4	6,123	0.4	6,197	1.8
<b>Cigarettes</b>	Very Easy	2,878	31.7	2,826	20.7	2,878	10.1	2,919	16.6
	Sort of Easy	2,163	22.6	2,125	10.0	2,142	2.6	2,179	8.4
	Sort of Hard	2,192	14.0	2,202	5.1	2,170	1.3	2,209	4.8
	Very Hard	6,350	7.9	6,333	1.2	6,329	0.3	6,413	1.6
<b>Marijuana</b>	Very Easy	1,479	41.3	1,451	25.7	1,465	19.1	1,498	24.7
	Sort of Easy	1,207	33.5	1,213	15.7	1,204	6.8	1,223	15.3
	Sort of Hard	1,537	23.2	1,509	8.7	1,535	0.6	1,553	7.5
	Very Hard	9,124	8.6	9,090	2.9	9,086	0.2	9,218	1.9

Notes: "N" represents the total number of students who provided a valid response to the survey questions.  
 "%" represents the percentage of the total number of students who reported that they have used the drug.

Table 49. Students' attitudes (perceive great risks of harm if...) towards ATOD use, by demographic characteristics.

Perceive great risks of harm if...	Drink One or More Drinks Every Day		Smoke a Pack or More of Cigarettes Every Day		Smoke Marijuana Regularly		Try Marijuana Once or Twice		Try Inhalants	
	N	%	N	%	N	%	N	%	N	%
Overall	14,956	42.5	15,009	62.1	14,671	75.6	14,910	38.3	15,013	70.1
Grade										
7th	7,402	44.4	7,446	63.1	7,261	78.2	7,386	41.9	7,437	68.7
8th	7,192	40.0	7,201	60.6	7,047	73.0	7,159	34.3	7,211	70.8
Sex										
Female	7,681	46.1	7,721	63.8	7,543	78.5	7,668	38.4	7,721	71.4
Male	7,124	38.9	7,128	60.4	6,981	72.8	7,090	38.3	7,138	69.0
Ethnicity										
White	7,916	41.6	7,934	65.7	7,794	81.3	7,896	37.9	7,945	74.9
African American	2,193	40.6	2,216	51.3	2,142	63.1	2,177	36.9	2,195	62.0
Latino	1,917	39.7	1,912	55.3	1,860	67.0	1,908	41.5	1,932	62.2
Asian	776	63.8	774	71.9	773	87.6	772	43.8	775	70.2
Other	566	38.9	574	61.4	551	71.4	571	36.8	564	60.9
Multiple	1,409	42.1	1,417	62.2	1,373	70.5	1,404	34.3	1,422	69.6

Notes: "N" represents the total number of students who provided a valid response to the survey questions. "%" represents the percentage of students who indicated a "Great" risk on a scale of "Great," "Moderate," "Slight," and "No Risk."

Table 50. Students' attitudes (think it is wrong or very wrong if...) towards selected ATOD use, by demographic characteristics.

Think it is wrong or very wrong if...	Drink Alcohol Regularly		Smoke Cigarettes		Smoke Marijuana		Use Other Illicit Drugs	
	N	%	N	%	N	%	N	%
Overall	15,574	85.9	15,642	85.6	15,603	93.3	15,618	97.5
Grade								
7th	7,789	89.9	7,760	90.4	7,761	96.5	7,759	98.4
8th	7,449	80.6	7,412	80.9	7,440	89.9	7,458	96.7
Sex								
Female	8,003	86.0	7,960	85.2	7,980	94.3	7,999	97.9
Male	7,474	85.1	7,449	86.8	7,459	92.4	7,458	97.2
Ethnicity								
White	8,130	86.4	8,106	86.6	8,114	94.0	8,125	97.8
African American	2,340	88.2	2,316	86.7	2,334	92.3	2,342	97.9
Latino	2,076	79.7	2,065	83.0	2,070	91.8	2,062	96.9
Asian	799	92.5	796	92.0	797	97.8	796	98.5
Other	597	81.9	598	84.1	587	93.1	590	96.9
Multiple	1,504	82.0	1,501	82.5	1,506	90.0	1,511	95.7

Notes: "N" represents the total number of students who provided a valid response to the survey questions. "%" represents the percentage of students who indicated a "Wrong" or "Very Wrong" on a scale of "Not Wrong at All," "A Little Bit Wrong," "Wrong," and "Very Wrong."

Table 51. Students' attitudes (seen as cool if...) towards selected ATOD use and delinquent behavior, by demographic characteristics.

Seen as cool if...	Drink Alcohol Regularly		Smoke Cigarettes		Smoke Marijuana		Carry a Gun	
	N	%	N	%	N	%	N	%
Overall	15,430	6.5	15,495	6.4	15,414	6.4	15,439	4.8
Grade								
7th	7,683	4.7	7,700	5.7	7,664	4.9	7,675	4.3
8th	7,345	8.4	7,392	7.2	7,353	8.1	7,372	5.3
Sex								
Female	7,881	6.5	7,920	6.8	7,881	6.0	7,891	4.4
Male	7,385	6.4	7,408	6.0	7,370	6.8	7,384	5.2
Ethnicity								
White	8,088	6.3	8,101	6.3	8,085	5.5	8,092	3.0
African American	2,277	8.0	2,320	6.7	2,259	9.2	2,270	9.1
Latino	2,018	6.4	2,029	6.5	2,023	6.0	2,026	6.1
Asian	784	2.9	789	3.8	789	3.4	786	4.2
Other	588	8.1	587	6.3	584	6.1	588	4.9
Multiple	1,487	6.5	1,483	8.0	1,487	9.4	1,489	5.8

Notes: "N" represents the total number of students who provided a valid response to the survey question. "%" represents the percentage of students who indicated a "Very Good Chance" or "Pretty Good Chance" on a scale of "No Chance or Very Little Chance," "Little Chance," "Some Chance," "Pretty Good Chance," and "Very Good Chance."

# Risk and Protective Factors

Just as eating a high-fat diet is considered a risk factor while getting regular exercise is considered 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**, which can be considered 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.

**Risk factors** are conditions that increase the likelihood of young people becoming involved in drug use, delinquency, school dropout, and/or violence.

Research during the past 30 years supports the view that delinquency, alcohol, tobacco, and other drug use, and 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 individual characteristics (Hawkins, Catalano & 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).

Identifying the protective factors that are most prominent in New Jersey is also an important step in a sound prevention-planning process. While many prevention programs target specific risk factors, protective factors are much more broadly defined and can have wide-ranging impact. Increases in the levels of protection experienced by young people will reduce the impact of risk factors. Consequently, it is critical to understand how protective factors are functioning. Understanding and prioritizing the risk and protective factors will allow prevention programming to be specifically targeted and consequently provide the greatest chance of its being successful.

Risk and protective factor scale scores are measured relative to the *Communities That Care*<sup>®</sup> national comparison database. A student's risk or protective factor scale score is expressed as a number ranging from 0 to 100. A score of 50 indicates the average for the normative population, with scores higher than 50 indicating above average scores, and scores below 50 indicating below average scores. Because risk is associated with negative behavioral outcomes, it is better to have lower scores, not higher. Conversely, because protective factors are associated with better behavioral outcomes, it is better to have protective factor scores with high values.

Because risk and protective factors are sensitive to age, sex, and ethnicity, it is important to have relevant data with which to compare. For the purposes of this report, a matched comparison sample was drawn from data on students who participated in the *Communities That Care*<sup>®</sup> Six-State Study and whose demographic characteristics match New Jersey middle schools' students exactly in terms of age, ethnicity, and gender. This may be an especially important consideration for New Jersey middle schools because the existence of an exact demographic match allows comparisons to be made with more confidence. Throughout the next section, the *Communities*

*That Care*<sup>®</sup> matched comparison for New Jersey middle schools will provide a strong reference point with which to evaluate their risk and protective factor profile.

The analysis of risk and protective factors is the most powerful paradigm available for understanding what promotes both positive and negative adolescent behavioral outcomes, and how the most successful adolescent prevention programs can be designed. The Social Development Strategy (Hawkins, Catalano et al, 1992) is a theoretical framework that informs and organizes the risk and protective factor framework of adolescent problem behavior. There is a substantial amount of research showing that exposure of adolescents 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, & Pandina, 1982; Newcomb, Maddahian & Skager, 1987; Newcomb & Felix-Ortiz, 1992; Newcomb, 1995; Pollard, Hawkins & Arthur, 1999; Arthur, Hawkins, Pollard, Catalano & Baglioni, 2001).

## ***Protective Factors***

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

The *2001 New Jersey Middle School Survey* measures a variety of protective factors across four major domains: Community Domain, Family Domain, School Domain, and Peer-Individual Domain. The protective factors can also be divided into three categories, or opportunities, for success, based on the Social Development Strategy: Bonding, Opportunities and Rewards for Prosocial Involvement, and Healthy Beliefs and Clear Standards. The Bonding category consists of the *Family Attachment* scale. The Opportunities and Rewards for Prosocial Involvement category consists of *Community Rewards for Prosocial Involvement*, *Family Opportunities for Prosocial Involvement*, *Family Rewards for Prosocial Involvement*, *School Opportunities for Prosocial Involvement*, and *School Rewards for Prosocial Involvement*. The Healthy Beliefs and Clear Standards category is the same as the Peer-Individual Domain, consisting of *Religiosity*, *Social Skills*, and *Belief in the Moral Order*.

For each domain, a variety of protective factors are assessed. Below, each protective factor is described and the results for New Jersey middle schools are reported. Protective factor scores are located at the end of this discussion in Table 52.

### **Community Domain**

#### *Community Rewards for Prosocial Involvement (5 Items, Scale 0-3)*

Young people experience bonding as feeling valued and being seen as an asset. Students who feel recognized and rewarded by their community are less likely to engage in negative behaviors,

because that recognition helps increase a student's self-esteem and the feeling of bonding to that community. *Community Rewards for Prosocial Involvement* is surveyed by such items as: "There are people in my neighborhood who are proud of me when I do something well."

In New Jersey middle schools, students reported a score of 49 on the *Community Rewards for Prosocial Involvement* scale. This level is slightly below the national average of 50 but is equal to the matched comparison score of 49. Survey results for the 1999 New Jersey middle school survey show a score of 47 for this protective factor.

## **Family Domain**

### *Family Attachment (4 Items, Scale 0-3)*

One of the most effective ways to reduce children's risk factors is to strengthen their bonds with family members who embody healthy beliefs and clear standards. Children who are bonded to others with 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 this connection by doing things that their parents strongly disapprove of. This protective factor is measured by such items on the survey as: "Do you share your thoughts and feelings with your mother?"

In New Jersey middle schools, students reported a score of 55 on the *Family Attachment* scale. This level is higher than the national average score of 50 and the matched comparison score of 50. Survey results for the 1999 New Jersey middle school survey show a score of 53 for this protective factor.

### *Family Opportunities for Prosocial Involvement (3 Items, Scale 0-4)*

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 closer to their family. These strong bonds cause students to more easily adopt the norms projected by their family, which in turn 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. This protective factor is surveyed by such items as, "My parents ask me what I think before most family decisions affecting me are made."

In New Jersey middle schools, students reported a score of 55 on the *Family Opportunities for Prosocial Involvement* scale. This level is higher than the national average score of 50 and the matched comparison score of 51. Survey results for the 1999 New Jersey middle school survey show a score of 53 for this protective factor.

### *Family Rewards for Prosocial Involvement (4 Items, Scale 0-3)*

When family members reward their children for positive participation in activities it helps the children feel bonded to their families, thus reducing their risk for problem behaviors. When families promote clear standards for behavior and when young people develop strong bonds of attachment and commitment to their families, the young people's behavior becomes increasingly consistent with those standards. This protective factor is measured by such survey items as, "How often do your parents tell you they're proud of you for something you've done?"

In New Jersey middle schools, students reported a score of 57 on the *Family Rewards for Prosocial Involvement* scale. This level is higher than both the national average of 50 and the matched comparison score of 51. Survey results for the 1999 New Jersey middle school survey show a score of 53 for this protective factor.

## **School Domain**

### *School Opportunities for Prosocial Involvement (5 Items, Scale 0-3)*

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 a personal investment in their school bond to that school and thus adopt the school's standards of behavior. This bond can protect a student from engaging in behaviors that violate socially accepted standards. This protective factor is measured by survey items such as, "In my school, students have lots of chances to help decide things like class activities and rules."

In New Jersey middle schools, students reported a score of 54 on the *School Opportunities for Prosocial Involvement* scale. This level is higher than both the national average of 50 and the matched comparison score of 47. Survey results for the 1999 New Jersey middle school survey show a score of 52 for this protective factor.

### *School Rewards for Prosocial Involvement (4 Items, Scale 0-3)*

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 acknowledged for their activity at school bond to their school. This protective factor is measured by such statements as, "The school lets my parents know when I have done something well."

In New Jersey middle schools, students reported a score of 48 on the *School Rewards for Prosocial Involvement* scale. This level is slightly lower than the national average of 50 and slightly higher than the matched comparison score of 47. Survey results for the 1999 New Jersey middle school survey show a score of 48 for this protective factor.

## Peer-Individual Domain

### *Religiosity (1 Item, Scale 0-3)*

Religious institutions can help students develop firm prosocial beliefs. Students who have preconceived ideas about certain activities are less vulnerable to becoming involved with antisocial behaviors because they have already adopted a social norm against those activities. Religiosity is measured by one survey item, “How often do you attend religious services or activities?”

In New Jersey middle schools, students reported a score of 56 on the *Religiosity* scale. This level is higher than both the national average of 50 and the matched comparison score of 52. Survey results for the 1999 New Jersey middle school survey show a score of 49 for this protective factor.

### *Social Skills (4 Items, Scale 0-3)*

Society helps to clearly define what behavior is acceptable or unacceptable. If these standards are not clear, it can be especially confusing for children and youth. This is particularly true with regard to alcohol and other drug use. Students who have positive and healthy interpersonal relationships and who understand how their society works are less likely to engage in problem behaviors.

*Social Skills* is surveyed 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?”

In New Jersey middle schools, students reported a score of 56 on the *Social Skills* scale. This level is higher than both the national average of 50 and the matched comparison score of 48. Survey results for the 1999 New Jersey middle school survey show a score of 50 for this protective factor.

### *Belief in the Moral Order (4 Items, Scale 0-3)*

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 ATOD 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 might be protected against peer influences to use drugs. *Belief in the Moral Order* is measured by items on the survey such as, “It is all right to beat up people if they start the fight.”

In New Jersey middle schools, students reported a score of 53 on the *Belief in the Moral Order* scale. This level is higher than both the national average of 50 and the matched comparison score of 47. Survey results for the 1999 New Jersey middle school survey show a score of 49 for this protective factor.

## **Risk Factors**

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Risk factors are characteristics in the community, school, family, and individual's environment 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 an adolescent 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 *2001 New Jersey Middle School Survey* measures a variety of risk factors across four major domains. Below, each of the risk factors in the Community, Family, School, and Peer-Individual Domains is described, and the results for New Jersey middle schools are reported in Table 53.

### **Community Domain**

#### *Low Neighborhood Attachment (3 Items, Scale 0-3)*

Higher rates of drug problems, delinquency, violence, and drug trafficking occur in communities or neighborhoods where people feel little attachment to the community. These conditions are not limited to low-income neighborhoods; they can also be found in affluent neighborhoods. Perhaps the most significant issue affecting community attachment is whether residents feel they can make a difference in their lives. If the key players in the neighborhood—such as merchants, teachers, clergy, police, and human and social services personnel—live outside the neighborhood, residents' sense of commitment will be lower. Lower rates of voter participation and parental involvement in schools can reflect attitudes of community attachment.

The *Low Neighborhood Attachment* scale on the survey uses three items to measure the level of attachment that students feel to their neighborhoods. This risk factor is measured by 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." Responses include YES!, yes, no, and NO!

In New Jersey middle schools, students reported a score of 48 on the *Low Neighborhood Attachment* scale. This level falls below the national average of 50 and the matched comparison score of 50. Survey results for the 1999 New Jersey middle school survey show a score of 52 for this risk factor.

### *Community Disorganization (5 Items, Scale 0-3)*

The *Community Disorganization* scale pertains to students' perceptions of their communities' appearance; this scale assesses students' feelings and perceptions about their neighborhoods' external attributes.

The *Community Disorganization* scale is based on students' responses to five items, four of which indicate a neighborhood in disarray (e.g., the existence of graffiti, abandoned buildings, fighting, and drug selling). The fifth item is, "I feel safe in my neighborhood."

In New Jersey middle schools, students reported a score of 56 on the *Community Disorganization* scale. This level is higher than both the national average of 50 and the matched comparison score of 53. Survey results for the 1999 New Jersey middle school survey show a score of 61 for this risk factor.

### *Transitions and Mobility (5 Items, Scale 0-3)*

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 a new environment, students no longer have the bonds they had in their old environment. Consequently, students may be less likely to become attached to their neighborhoods and develop the bonds that protect them from getting involved in problem behaviors.

There are two measures of *Transitions and Mobility* on the survey. One scale on the survey, *Personal Transitions and Mobility*, measures how often the student has changed homes or schools in the past year and since kindergarten. This risk factor is measured with items such as: "How many times have you changed schools since kindergarten?" and "How many times have you changed homes since kindergarten?" The other scale on the survey, *Community Transitions and Mobility*, measures students' perceptions of the stability of their neighborhoods with one item: "People move in and out of my neighborhood a lot." Responses include YES!, yes, no, and NO!

In New Jersey middle schools, students reported a score of 46 on the *Personal Transitions and Mobility* scale and a score of 51 on the *Community Transitions and Mobility* scale. The *Personal Transitions and Mobility* level is lower than both the national average score of 50 and the matched comparison score of 53. The *Community Transitions and Mobility* finding is slightly above the national average of 50 and slightly below the matched comparison score of 52. Survey results for the 1999 New Jersey middle school survey show a score of 47 for the *Personal Transitions and Mobility* scale and a score of 51 for the *Community Transitions and Mobility* scale.

### *Laws and Norms Favorable to Drug Use and Firearms (6 Items, Scale 0-3)*

Students' perceptions of the rules and regulations toward alcohol, tobacco, and other drug use that exist in their neighborhood 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, or crime, or even when they are just unclear, young people are more likely to engage in negative behaviors (Bracht & 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 drug and alcohol use that a clear, community-level, anti-drug message can have.

This risk factor is measured by six items on the survey, such as, “How wrong would most adults in your neighborhood think it was for kids your age to drink alcohol?” In this case, responses include Very Wrong, Wrong, A Little Bit Wrong, and Not Wrong at All. Other items include, “If a kid smoked marijuana in your neighborhood, would he or she be caught by the police?” Responses include YES!, yes, no, and NO!

In New Jersey middle schools, students reported a score of 38 on the *Laws and Norms Favorable to Drug Use and Firearms* scale. This level is much lower than the national average of 50 and the matched comparison score of 48. Survey results for the 1999 New Jersey middle school survey show a score of 43 for this risk factor.

### *Perceived Availability of Drugs and Firearms (5 Items, Scale 0-3)*

The perceived availability of drugs, alcohol, and firearms in a community is directly related to the prevalence of delinquent behaviors. The perception of availability of drugs is also associated with increased risk; in schools where children believe that drugs are more available, a higher rate of drug use occurs.

The *Perceived Availability of Drugs and Firearms* scale on the survey is designed to assess students' feelings about how easily they can obtain alcohol, other drugs, and firearms. Four items on the survey measure the perceived availability of drugs. An example item is, “If you wanted to get some marijuana, how easy would it be for you to get some?” Possible responses include: Very Hard, Sort of Hard, Sort of Easy, and Very Easy. The fifth item on the scale measures the perceived availability of firearms.

Elevation of this risk factor may indicate the need to make alcohol, tobacco, and other illicit 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 have an impact on the perception of availability of alcohol.

In New Jersey middle schools, students reported a score of 28 on the *Perceived Availability of Drugs and Firearms* scale. This level is notably lower than both the national average of 50 and the matched comparison score of 47. Survey results for the 1999 New Jersey middle school survey show a score of 35 for this risk factor.

## **Family Domain**

### *Poor Family Management (9 Items, Scale 0-3)*

Poor family management practices are defined as parents failing to communicate clear expectations for behavior, parents failing to supervise and monitor their children (knowing where they are and whom they're with), and parents giving excessively severe, harsh, or inconsistent punishment. *Poor Family Discipline*, for instance, assesses students' perceptions of the likelihood that their parents will catch them if they become involved in drug use and other antisocial behaviors. Children exposed to poor family management practices are at higher risk of developing problems with drug use, delinquency, violence, and school dropout.

The survey was designed to measure each of these aspects of this risk factor. Two scales were developed to summarize students' feelings about their families' management practices: *Poor Family Supervision* and *Poor Family Discipline*. Sample items used to survey poor family management include, "Would your parents know if you did not come home on time?" and, "My family has clear rules about alcohol and drug use."

In New Jersey middle schools, students reported a score of 46 on the *Poor Family Supervision* scale and a score of 41 on the *Poor Family Discipline* scale. The New Jersey middle schools' *Poor Family Supervision* score falls below both the national average of 50 and the matched comparison score of 48. The *Poor Family Discipline* score is lower than both the national average of 50 and the matched comparison score of 48. Survey results for the 1999 New Jersey middle school survey show a score of 50 for the *Poor Family Supervision* scale and a score of 48 for the *Poor Family Discipline* scale.

### *Family History of Antisocial Behavior (10 Items, Scale 0-3)*

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 or behavior is normal, their risk for delinquency increases. Similarly, children who are born to a teenage mother 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. This risk factor is assessed by items such as, "Has anyone in your family ever had a severe alcohol or drug problem?"

In New Jersey middle schools, students reported a score of 35 on the *Family History of Antisocial Behavior* scale. This level is considerably lower than both the national average of 50 and the matched comparison score of 50. Survey results for the 1999 New Jersey middle school survey show a score of 42 for this risk factor.

### *Parental Attitudes Favorable toward ATOD Use (3 Items, Scale 0-3)*

Students' perceptions of their parents' opinions about alcohol, tobacco, and marijuana use are also an important risk factor. In families where parents use illicit drugs, are heavy users of alcohol, or are tolerant of use by their children, children are more likely to become drug users in adolescence. This risk is further increased if parents involve children in their own drug- or alcohol-using behavior—for example, asking the child to light the parent's cigarette or get the parent a beer from the refrigerator. Furthermore, parental approval of young people's moderate drinking, even under parental supervision, increases the risk of the young person's using marijuana and developing a drug use problem.

This risk factor is measured by items such as, "How wrong do your parents feel it would be for you to smoke marijuana?" Looking at this risk factor together with *Laws and Norms Favorable to Drug Use and Firearms* (Community Domain) can indicate whether or not the youth in your community report strong anti-drug messages from adults (both parents and other local adults). In New Jersey middle schools, students reported a score of 40 on the *Parental Attitudes Favorable toward ATOD Use* scale. This level is lower than both the national average of 50 and the matched comparison score of 51. Survey results for the 1999 New Jersey middle school survey show a score of 44 for this risk factor.

### *Parental Attitudes Favorable toward Antisocial Behavior (3 Items, Scale 0-3)*

Parental attitudes and behavior regarding drugs, 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 survey also measures a student's understanding of his or her parents' standards regarding the student's participation in delinquent behaviors. This risk factor, *Parental Attitudes Favorable toward Antisocial Behavior*, is surveyed by items such as, "How wrong do your parents feel it would be for you to pick a fight with someone?"

In New Jersey middle schools, students reported a score of 50 on the *Parental Attitudes Favorable toward Antisocial Behavior* scale. This level is equal to the national average of 50 and

higher than the matched comparison score of 47. Survey results for the 1999 New Jersey middle school survey show a score of 52 for this risk factor.

## **School Domain**

### *Poor Academic Performance (2 Items, Scale 0-5)*

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 itself increases the risk of these problem behaviors.

*Poor Academic Performance*—students’ feelings about their performance at school—is measured with two questions on the survey: “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 suggest that not only do students believe that they have lower grades than would be expected, but they perceive that compared to their peers they have below average grades.

In New Jersey middle schools, students reported a score of 51 on the *Poor Academic Performance* scale. This level is slightly higher than the national average of 50 and slightly lower than the matched comparison score of 52. Survey results for the 1999 New Jersey middle school survey show a score of 53 for this risk factor.

### *Low School Commitment (9 Items, Scale 0-4)*

Nine items on the survey assess *Low School Commitment*—a student’s general feelings about his or her schooling. Survey items include “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?” Elevated findings for this risk factor can suggest that students feel less attached to, or connected with, their classes and school environments. 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 the problem behaviors.

In New Jersey middle schools, students reported a score of 49 on the *Low School Commitment* scale. This level is slightly lower than the national average of 50 and slightly lower than the matched comparison score of 53. Survey results for the 1999 New Jersey middle school survey show a score of 55 for this risk factor.

## Peer-Individual Domain

### *Rebelliousness (3 Items, Scale 0-3)*

The survey also assesses 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. *Rebelliousness* is measured by three items, such as "I ignore the rules that get in my way."

In New Jersey middle schools, students reported a score of 48 on the *Rebelliousness* scale. This level is slightly lower than the national average of 50 and somewhat lower than the matched comparison score of 53. Survey results for the 1999 New Jersey middle school survey show a score of 54 for this risk factor.

### *Friends' Delinquent Behavior (6 Items, Scale 0-4)*

The *Friends' Delinquent Behavior* scale measures antisocial behaviors acted out within the past year by the four best friends of the student. Six items survey this risk factor, such as, "In the past year, how many of your four best friends have been suspended from school?" An elevated score for this risk factor can suggest that students' involvement in antisocial behaviors is heavily influenced by their peers. A low score can suggest that students' delinquent behavior is not strongly influenced by their peers.

Young people who associate with peers who engage in a problem behavior—delinquency, substance use, violent activity, or dropping out of school—are much more likely to engage in the same problem behavior. 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 problem behaviors greatly increases the risk of their becoming involved in problem behaviors.

In New Jersey middle schools, students reported a score of 50 on the *Friends' Delinquent Behavior* scale. This level is equal to the national average of 50 and lower than the matched comparison score of 53. Survey results for the 1999 New Jersey middle school survey show a score of 54 for this risk factor.

### *Friends' Use of Drugs (4 Items, Scale 0-4)*

The *Friends' Use of Drugs* scale measures how many of a student's close friends have used ATODs in the past year. A sample survey item for this risk factor is, "In the past year, how many of your best friends have used marijuana?" An elevated score can indicate that students are interacting with more antisocial peers than average.

In New Jersey middle schools, students reported a score of 35 on the *Friends' Use of Drugs* scale. This level is notably lower than the national average of 50 and the matched comparison

score of 47. Survey results for the 1999 New Jersey middle school survey show a score of 45 for this risk factor.

### *Peer Rewards for Antisocial Behavior (4 Items, Scale 0-3)*

Students' perceptions of their peer groups' social norms are also an important predictor of involvement in problem behavior. Any indication that students feel that they get positive feedback from their peers if they use alcohol, tobacco, or other drugs or if they get involved in delinquent behaviors is important to note and understand. When young people believe that their peer groups are involved in antisocial behaviors, they are more likely to become involved in antisocial behaviors themselves. This risk factor is measured by items such as, "What are the chances you would be seen as cool if you smoked marijuana?"

In New Jersey middle schools, students reported a score of 40 on the *Peer Rewards for Antisocial Behavior* scale. This level is notably lower than both the national average of 50 the matched comparison score of 51. Survey results for the 1999 New Jersey middle school survey show a score of 45 for this risk factor.

### *Favorable Attitudes toward Antisocial Behavior (5 Items, Scale 0-3)*

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

These attitudes are measured on the survey by items like, "How wrong do you think it is for someone your age to pick a fight with someone?" There are five such items, and responses range from Very Wrong to Not Wrong at All.

In New Jersey middle schools, students reported a score of 54 on the *Favorable Attitudes toward Antisocial Behavior* scale. This level is slightly higher than both the national average of 50 and the matched comparison score of 52. Survey results for the 1999 New Jersey middle school survey show a score of 59 for this risk factor.

### *Favorable Attitudes toward ATOD Use (4 Items, Scale 0-3)*

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 participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This acceptance places them at higher risk. This risk factor, *Favorable Attitudes toward ATOD Use*, assesses risk by asking young people how wrong they think it is for someone their age to use drugs. Items include, "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.

In New Jersey middle schools, students reported a score of 37 on the *Favorable Attitudes toward ATOD Use* scale. This level is significantly lower than both the national average of 50 and the matched comparison score of 47. Survey results for the 1999 New Jersey middle school survey show a score of 43 for this risk factor

### *Low Perceived Risks of Drug Use (4 Items, Scale 0-3)*

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. *Low Perceived Risks of Drug Use* is measured with four 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.

In New Jersey middle schools, students reported a score of 33 on the *Low Perceived Risks of Drug Use* scale. This level is substantially below the national average of 50 and the matched comparison score of 48. Survey results for the 1999 New Jersey middle school survey show a score of 40 for this risk factor.

### *Early Initiation of Drug Use and Antisocial Behavior (8 Items, Scale 0-9)*

This risk factor measures persistent antisocial behavior (both drug use and involvement in delinquent behaviors) in early adolescence, such as misbehaving in school, experimenting with cigarettes, and getting into fights with other children. Both girls and boys who engage in these behaviors in early adolescence are at increased risk. The earlier young people drop out of school or commit crimes, the greater the likelihood that they will have chronic problems with these behaviors later in life.

On the survey, the onset of drug use is measured by asking the student at what age drug use began (if at all). The earlier that drug experimentation begins, the more likely it is that experimentation will become consistent, regular use. Similarly, *Early Initiation of Antisocial Behavior* is measured by four items that ask when specific delinquent behaviors began. The behaviors that are measured on the survey include getting suspended from school, getting arrested, carrying a handgun, and attacking somebody with the intent to hurt them. The earlier these behaviors occur, the more likely it is that they become a consistent way of life.

In New Jersey middle schools, students reported a score of 40 on the *Early Initiation of Drug Use and Antisocial Behavior* scale. This level is notably lower than both the national average of 50 and the matched comparison score of 53. Survey results for the 1999 New Jersey middle school survey show a score of 48 for this risk factor.

### *Constitutional Factors—Impulsiveness and Sensation Seeking* (7 Items, Scale 0-3)

Constitutional factors are individual characteristics that may have a biological or physiological basis. Constitutional factors are often seen in young people as behaviors such as sensation seeking, low harm avoidance, and lack of impulse control. They appear to increase the risk of young people using drugs, engaging in delinquent behavior, and/or committing violent acts.

*Impulsiveness* surveys the level at which students act before they think. This risk factor is measured by items such as: “I often do things without thinking about what will happen” and “How often have you done something dangerous because someone dared you to do it?” *Sensation Seeking* is assessed by asking how often students participate in behaviors to experience a particular feeling or emotion. *Sensation Seeking* is measured with three survey items such as, “How many times have you done crazy things even if they are a little dangerous?”

In New Jersey middle schools, students reported a score of 50 on the *Impulsiveness* scale and a score of 45 on the *Sensation Seeking* scale. The score for *Impulsiveness* is equal to the national average of 50 and slightly below the matched comparison score of 53. The score for *Sensation Seeking* is lower than the national average of 50 and the matched comparison score of 49. Survey results for the 1999 New Jersey middle school survey show a score of 53 on the *Impulsiveness* scale and of 50 on the *Sensation Seeking* scale.

## ***Risk and Protective Factor Profile***

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New Jersey middle schools’ overall risk and protective factor scores reveal several important findings. First, slightly elevated risk factor scores—when contrasted with the *Communities That Care*<sup>®</sup> matched comparison scores—are found for *Community Disorganization*, *Parental Attitudes Favorable toward Antisocial Behavior*, and *Favorable Attitudes toward Antisocial Behavior*. However, while these risk factor scores were slightly elevated, many of the remaining risk factor scores were substantially lower than both the national average and the CTC matched comparison scores. For example, *Laws and Norms Favorable toward Drug Use and Firearms*, *Perceived Availability of Drugs and Firearms*, *Family History of Antisocial Behavior*, *Parental Attitudes Favorable toward ATOD Use*, *Friends’ Use of Drugs*, *Peer Rewards for Antisocial Behavior*, *Favorable Attitudes toward ATOD Use*, *Low Perceived Risks of Drug Use*, and *Early Initiation of Drug Use* all showed low levels in New Jersey middle school students. Taken as a whole, it appears that New Jersey middle school students have a generally positive risk factor profile.

Consistent with the risk factor profile, the protective factors were uniformly equal to or above the national average and the CTC matched comparison scores. Especially positive were the protective factors in the Family Domain, *School Opportunities for Prosocial Involvement* in the School Domain, as well as *Social Skills* and *Belief in the Moral Order* in the Peer-Individual Domain.

Table 52. Protective factor scale scores.

	New Jersey 1999	New Jersey 2001	CTC Matched Comparison
<b>Community Domain</b>			
Community Opportunities for Prosocial Involvement	*	*	*
Community Rewards for Prosocial Involvement	47	49	49
<b>Family Domain</b>			
Family Attachment	53	55	50
Family Opportunities for Prosocial Involvement	53	55	51
Family Rewards for Prosocial Involvement	53	57	51
<b>School Domain</b>			
School Opportunities for Prosocial Involvement	52	54	47
School Rewards for Prosocial Involvement	48	48	47
<b>Peer-Individual Domain</b>			
Religiosity	49	56	52
Social Skills	50	56	48
Belief in the Moral Order	49	53	47
<b>Average Protective Factor Score</b>	<b>50</b>	<b>54</b>	<b>49</b>

\* This scale is currently under revision.

Notes: A score of 50 indicates the average for the normative population, with scores higher than 50 indicating above average scores, and scores below 50 indicating below average scores. Because risk is associated with negative behavioral outcomes, it is better to have lower scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scores with high values.

Table 53. Risk factor scale scores.

	New Jersey 1999	New Jersey 2001	CTC Matched Comparison
<b>Community Domain</b>			
Low Neighborhood Attachment	52	48	50
Community Disorganization	61	56	53
Personal Transitions and Mobility	47	46	53
Community Transitions and Mobility †	51	51	52
Laws and Norms Favorable to Drug Use and Firearms †	43	38	48
Perceived Availability of Drugs and Firearms †	35	28	47
<b>Family Domain</b>			
Poor Family Supervision	50	46	48
Poor Family Discipline	48	41	48
Family Conflict	*	*	*
Family History of Antisocial Behavior	42	35	50
Parental Attitudes Favorable toward ATOD Use	44	40	51
Parental Attitudes Favorable toward Antisocial Behavior	52	50	47
<b>School Domain</b>			
Poor Academic Performance †	53	51	52
Low School Commitment	55	49	53
<b>Peer-Individual Domain</b>			
Rebelliousness †	54	48	53
Friends' Delinquent Behavior	54	50	53
Friends' Use of Drugs	45	35	47
Peer Rewards for Antisocial Behavior	45	40	51
Favorable Attitudes toward Antisocial Behavior †	59	54	52
Favorable Attitudes toward ATOD Use	43	37	47
Low Perceived Risks of Drug Use	40	33	48
Early Initiation of Drug Use and Antisocial Behavior	48	40	53
Impulsiveness	53	50	53
Sensation Seeking	50	45	49
<b>Average Risk Factor Score</b>	<b>49</b>	<b>44</b>	<b>50</b>

\* This scale is currently under revision.

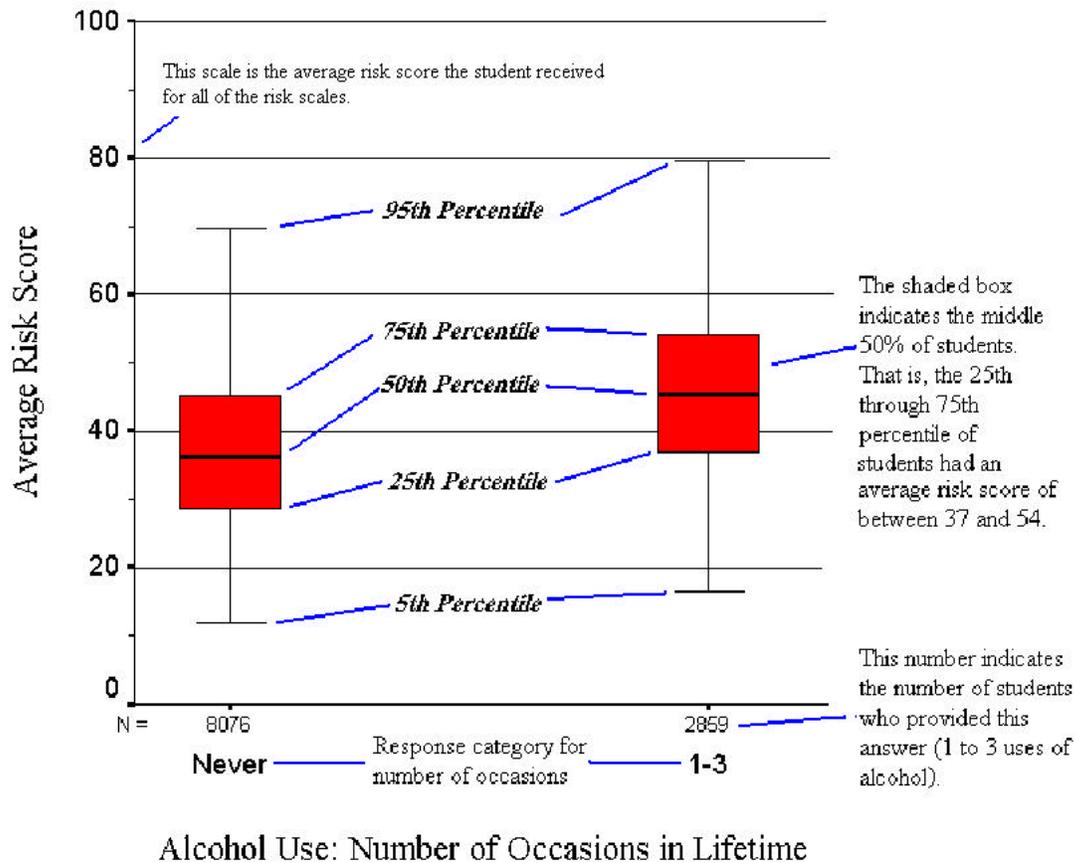
† These scores have been corrected from what was originally reported in the 1999 survey.

Notes: A score of 50 indicates the average for the normative population, with scores higher than 50 indicating above average scores, and scores below 50 indicating below average scores. Because risk is associated with negative behavioral outcomes, it is better to have lower scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scores with high values.

## Boxplot Displays of Risk and Protective Factors

“Boxplot” displays are an effective way of showing the relationship between the level of risk and protective factors measured in students’ lives and students’ involvement in ATOD use and delinquency. Each boxplot graphically shows how the average level of risk is related to the level of use of an ATOD substance or involvement in a delinquent behavior within a specific prevalence period. Average risk is defined as the average score for a student for all measured risk factors. In the example below (Figure 1), the number of times students reported using alcohol in their lifetimes is being analyzed.

Figure 1. Example of a boxplot display.



In a boxplot diagram, an individual box symbol summarizes the distribution of data within a data set. That is, it shows the range of average risk scores that students received. Specific points on the boxplot symbol correspond to specific percentiles within the distribution. The size of the box,

and of the length of the lines extending from the box (called “whiskers”), provides information about how “spread out” the distribution is.

For instance, in Figure 1, information on the distribution of the average risk score value is provided for students who (1) reported that they had never used alcohol in their lifetime or (2) had used alcohol from 1 to 3 times in their lifetime. For students who had never used alcohol, the average risk level was 37. That is, the 50<sup>th</sup> percentile for the distribution of average risk scores was 37. The 25<sup>th</sup> percentile was equivalent to a score of 29, and the 75<sup>th</sup> percentile was equivalent to an average risk score of 45. In other words, the middle 50% of students (students from the 25<sup>th</sup> to the 75<sup>th</sup> percentile) who had never used alcohol received an average risk score between 29 and 45. For students who had used alcohol from 1 to 3 times, the equivalent 25<sup>th</sup> percentile score was 37, and the 75<sup>th</sup> percentile score was 54. The average (50<sup>th</sup> percentile) was 46. Thus, the middle 50% of students who had used alcohol had average risk scores between 36 and 54. This suggests that higher levels of average risk were associated with some use of alcohol, compared to students reporting no alcohol use.

Additional information is also present in each figure. The number of students who responded to the survey question is indicated on the graph by the answer they gave. In the example, 8,076 students reported that they had never used alcohol, and 2,859 students reported that they had used alcohol from 1 to 3 times. Also, the specific drug and prevalence period are always identified in the text at the bottom of the figure.

While this example has focused on average risk, boxplots are equally useful in showing the relationship between average protection levels and ATOD use. It is also possible to use this display with other behaviors, such as delinquent behaviors occurring in the past year. In the case of delinquent behaviors, the interpretation of the graph is exactly the same.

Figures 2 through 5 show the relationship of risk and protective factors to two behavioral outcomes: alcohol use in the past 30 days, and Attacking Someone with Intent to Harm (past year). These results are typical of the relationship between risk and protective factors and ATOD and delinquency outcomes. What is most obvious about these figures is that any increase in risk is associated with an increase in the probability that the student engaged in the problem behavior; or, conversely, that any increase in protection is associated with a decrease in the probability of the occurrence of the behavior. It is important to note that, in these analyses, the risk and protective factors are unweighted. That is, no attempt is made to find the most important risk or protective factor. Rather, these analyses rely on a simple aggregation of risk or protective factors as the primary measure. Appendix G, Figures G1 through G46, show the relationship between risk and protective factors and all of the ATOD substances and delinquent behaviors included in this report.

Figure 2. The relationship between average risk factor scores and the number of occasions alcohol was used in the past 30 days.

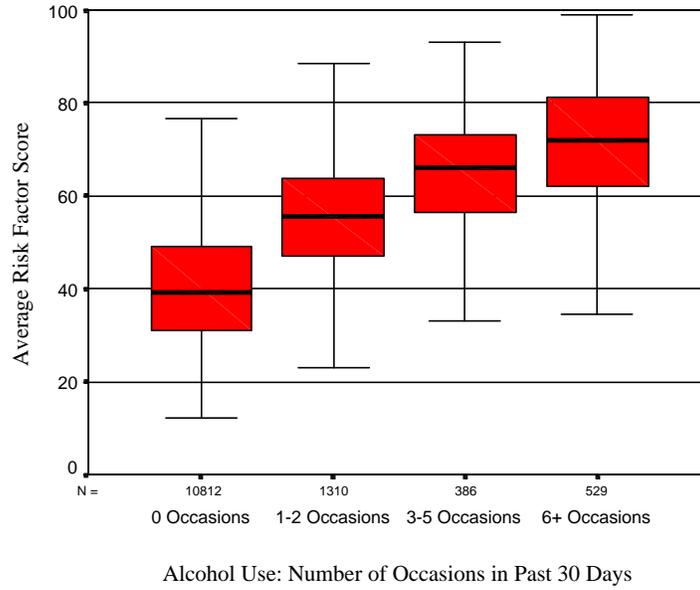


Figure 3. The relationship between average risk factor scores and the number of occasions of attacking someone with the intent to harm in the past year.

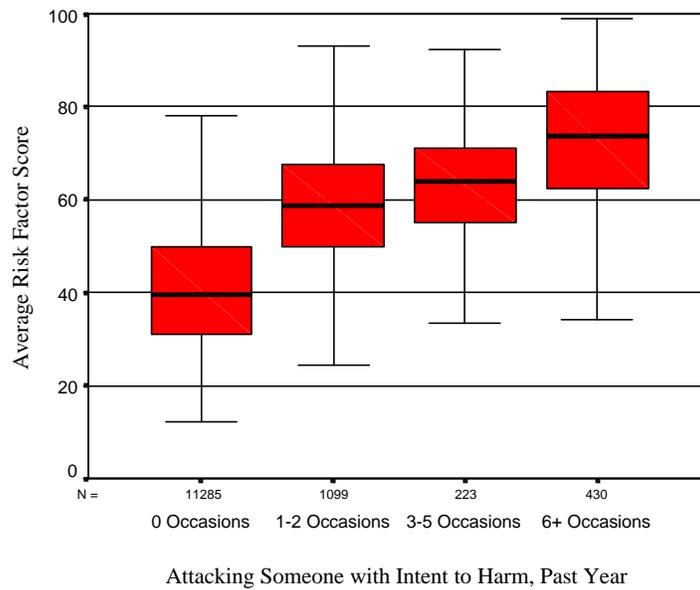


Figure 4. The relationship between average protective factor scores and the number of occasions alcohol was used in the past 30 days.

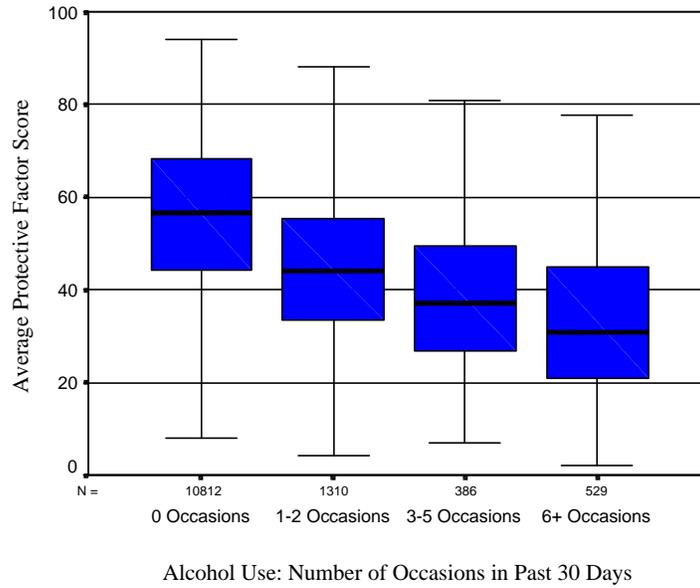
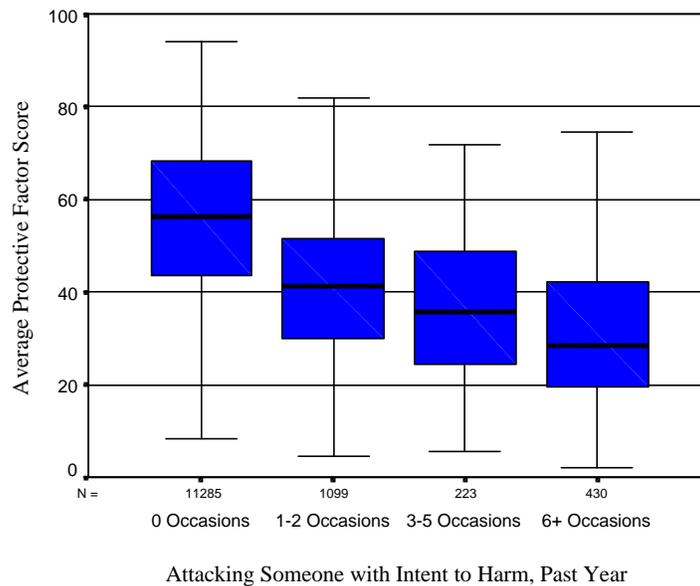


Figure 5. The relationship between average protective factor scores and the number of occasions of attacking someone with the intent to harm in the past year.



The boxplot analyses look at the aggregate effects of risk and protective factors. That is, no discrimination or distinction is made in these analyses as to the specific type of risk or protective factor. An alternative approach to understanding risk and protective factors is by use of a theoretical framework called the Social Development Strategy (Hawkins, Catalano et al, 1992); see Appendix D. Parents support the development of healthy behaviors for their children by setting and communicating healthy beliefs and clear standards for children's behavior. Children are more likely to follow the standards if the bonds to their family are strong. Strong family bonds are the reason children care about the standards parents set for their behavior. Parents can keep family bonds strong by providing children with opportunities to make meaningful contributions to the family, by teaching them the skills they need to be successful in these new opportunities, and by giving them recognition for their contributions. Individual characteristics may make it easier for some children to take advantage of opportunities for involvement, learn skills necessary for success, and attract positive recognition from adults. Each of the risk and protective factors represents one component of this theoretical model.

# Conclusion

With limited exceptions, the *2001 New Jersey Middle School Survey* finds consistent improvement in the prevalence of drug use among New Jersey middle school students (see Tables 5 and 6). Some of the more important positive findings regarding ATOD use include:

- A change in lifetime alcohol use from 57.0% in 1995, to 52.8% in 1999, to 44.6% in 2001, a 12 percentage point reduction.
- A parallel reduction in past-30-day alcohol use from 30.0% in 1995, to 24.6% in 1999, to 16.0% in 2001, a drop of 14 percentage points. This change represents a nearly 47% reduction since 1995 in the past 30-day alcohol use rate for New Jersey middle school students.
- Cigarette smoking rates have declined dramatically since 1999. The lifetime and past-30-day prevalence rates for cigarettes in 1999 were 38.4% and 12.5%, respectively. In the 2001 survey, these figures were 25.2% and 7.2%, respectively.
- Marijuana rates declined from highs in 1995 of 14.0% and 8.0% for lifetime and past-30-day use, respectively, to 6.4% and 2.9% in 2001.
- There were more limited reductions for other substances. The only exception to this trend was a slight increase of 1.1 percentage points in the lifetime inhalant rate since 1999. Otherwise, in virtually all the categories, measured prevalence rates improved.

*Comparisons to National Data:* If ATOD use is dropping in New Jersey middle schools we would expect to see a similar pattern in other areas of the country. This question is addressed in Table 54, which compares the trend in New Jersey to national data from the *Monitoring the Future* study (data are only presented for the higher prevalence drugs—alcohol, tobacco, marijuana and inhalants). The key information, which appears in the third pair of data columns, shows the change in prevalence rates between 1999 and 2001 for both studies. While these figures do reveal an overall decline in ATOD use among 8<sup>th</sup> graders across the nation, New Jersey 8<sup>th</sup> graders, with the exception of inhalant use, reported larger reductions in ATOD prevalence rates. The differences for alcohol and marijuana use are especially striking. Between 1999 and 2001, past-30-day alcohol use among New Jersey 8<sup>th</sup> graders dropped 8.5 percentage points compared to just 2.5 percentage points in the *Monitoring the Future* study. Similarly, past-30-day marijuana use dropped 5.2 percentage points in New Jersey and only 0.5 percentage points in the *Monitoring the Future* study.

With differences of this magnitude across a two year period, reviewers are justified in asking: Are ATOD prevalence rates among New Jersey 8<sup>th</sup> graders really dropping at a higher rate than they are among 8<sup>th</sup> graders across the nation? Is it possible, instead, that some inconsistency or flaw in the survey process inflated these improvements?

The first two usual suspects in this type of investigation are questionnaire design and survey administration. Could there be something about the survey instrument itself or the way it is deployed in the schools that resulted in underreporting of ATOD use in 2001? As described in

this report's introduction, the ATOD items used in the *2001 New Jersey Middle School Survey* are designed to provide comparability with national data. In most cases, the question wording is identical or nearly identical to that used by *Monitoring the Future*. The administrative procedures meet professional standards for school-based youth surveys, and have been used successfully to deploy the *Communities That Care*<sup>®</sup> survey instrument in numerous statewide research efforts.

The results from the *1999 New Jersey Middle School Survey* also support the integrity of the questionnaire design and survey administration. Since the 1999 and 2001 surveys employ nearly identical questionnaire design and administrative procedures, underreporting, if it is caused by these factors, should appear in both years. Data presented in the first four columns of Table 54, however, indicate that this is not the case. Overall, ATOD use reported by New Jersey 8<sup>th</sup> graders in 1999 is much closer to national findings than it was in 2001.

This points toward self-selection bias in the school sample as the most likely source of potential error. In other words, because the 2001 survey was conducted only at schools volunteering for the survey, could the improvement in ATOD rates be attributed to a bias in the participating schools? Maybe schools with serious student behavior problems were more likely to opt out of the 2001 study, thereby exaggerating improvements for the state as a whole.

*Other Behavioral Indicators:* A good first step toward answering this question is to examine how other behavioral indicators changed between 1999 and 2001. While the ATOD measures showed consistent positive improvement, there was essentially no change in the prevalence of other antisocial behaviors (see Table 35). One behavior (getting suspended) increased by more than 1 percentage point from 1999, three behaviors (attempting to steal a vehicle, being drunk or high at school, and selling drugs) decreased by more than 1 percentage point, and the remaining behaviors changed by less than 1 percentage point. Excluding the two antisocial behaviors associated with drug use, the conclusion is that there was essentially no change from 1999 to 2001 in the prevalence of these other antisocial behaviors.

If a school selection bias was present in the sample, and was the origin of the changes in ATOD use, it is reasonable to expect that the same sort of improvements would have been observed in the prevalence of these antisocial behaviors. Instead, we observe significant reductions over time in ATOD use and no change in delinquency.

*Subsample Comparison:* A second method for checking sampling consistency in longitudinal research is to examine results for the sampling units (in this case schools) that participated in multiple waves of the study. Fortunately, nine schools participated in both the 1999 and 2001 surveys. Since the grade level distribution is slightly different in each year, it is important to only compare within each grade. For this reason, and to provide a direct comparison with *Monitoring the Future* data, only the responses of 8<sup>th</sup> graders will be reviewed. In the 1999 study, 1,372 8<sup>th</sup> graders (34.1% of the 8<sup>th</sup> grade sample) attended one of the nine multi-study schools. In 2001, the total number of 8<sup>th</sup> graders from these nine schools increased to 1,924, while their proportion relative to the full sample decreased to 24.6%.

Table 55 compares changes in alcohol, tobacco, marijuana and inhalant use for the full-state sample and the nine-school subsample. The third set of data columns show the difference in prevalence rates between 1999 and 2001. While there are minor differences within each drug use category, the general pattern is remarkably consistent. Eighth graders from the nine-school subsample reported similar reductions in ATOD use when compared to the full samples for 1999 and 2001. For example, when results for the two full samples are compared, the prevalence rate for lifetime alcohol use dropped 4.7 percentage points between 1999 and 2001. Among the nine-school subsample, the rate change was just slightly higher at 5.2 percentage points. Similarly, past-30-day marijuana use dropped 5.2 percentage points across the full samples and 5.5 points across the nine-school subsamples. If selection bias was the primary cause of the drop in ATOD rates in the 2001 study, we would expect, at the very least, to see a smaller reduction in ATOD prevalence among the schools that participated in both studies.

Summary: Overall, these analyses support the accuracy of the *2001 New Jersey Middle School Survey* results. Three pieces of evidence suggest that it is unlikely that flaws or inconsistencies in questionnaire design or survey administration contributed to the drop in ATOD rates:

- The wording for most ATOD items is identical or nearly identical to that used by *Monitoring the Future*.
- Administrative procedures meet professional standards for school-based youth surveys, and have been used successfully to deploy the *Communities That Care*<sup>®</sup> survey instrument in numerous statewide research efforts.
- Nearly identical survey forms and administrative procedures were employed in both the *1999* and *2001 New Jersey Middle School Surveys*.

Additional analyses also indicate that the impact of school selection bias in the 2001 study, if it exists, is relatively small:

- Other behavioral indicators, which should have declined alongside ATOD rates if problem schools were opting out of the study, remained constant.
- Changes in ATOD prevalence rates for the nine schools that participated in both the 1999 and 2001 surveys closely match changes for the full samples.

While these analyses cannot rule out the possibility that methodological issues contributed to the substantial reductions in ATOD prevalence rates, they do support the conclusion that New Jersey is in the midst of a significant, long-term reduction in drug use prevalence among 7<sup>th</sup> and 8<sup>th</sup> grade students. By continuing surveillance of drug use prevalence in middle schools, New Jersey will have available the information it needs to continue its drug prevention efforts. The real power of these data can then be harnessed as they are used for prevention, intervention and treatment planning at the local level. One of the primary benefits of conducting the *2001 New Jersey Middle School Survey* is that the data can continue to be used as the baseline against which future prevention and intervention efforts can be assessed.

Table 54. Comparison of ATOD prevalence-of-use among 8<sup>th</sup> graders, as reported by the New Jersey Middle School Survey and the *Monitoring the Future* study, for surveys conducted in 1999 and 2001.

	1999		2001		Change	
	<u>New Jersey</u>	<u>Monitoring the Future</u>	<u>New Jersey</u>	<u>Monitoring the Future</u>	<u>New Jersey</u>	<u>Monitoring the Future</u>
	%	%	%	%		
Alcohol, Lifetime	58.0	52.1	53.3	50.5	-4.7	-1.6
Alcohol, Annual	50.8	43.5	39.3	41.9	-11.5	-1.6
Alcohol, 30 Days	30.2	24.0	21.7	21.5	-8.5	-2.5
Alcohol, Binge Drinking	12.6	15.2	9.8	13.2	-2.8	-2.0
Cigarettes, Lifetime	44.6	44.1	31.5	36.6	-13.1	-7.5
Cigarettes, Annual	23.9	*	16.5	*	-7.4	*
Cigarettes, 30 Days	15.8	17.5	10.2	12.2	-5.6	-5.3
Smokeless Tobacco, Lifetime	8.8	14.4	5.3	11.7	-3.5	-2.7
Smokeless Tobacco, Annual	*	*	4.4	*	*	*
Smokeless Tobacco, 30 Days	3.9	4.5	2.7	4.0	-1.2	-0.5
Marijuana, Lifetime	16.3	22.0	9.7	20.4	-6.6	-1.6
Marijuana, Annual	14.0	16.5	7.8	15.4	-6.2	-1.1
Marijuana, 30 Days	9.9	9.7	4.7	9.2	-5.2	-0.5
Inhalants, Lifetime	7.6	19.7	9.4	17.1	1.8	-2.6
Inhalants, Annual	6.1	10.3	5.0	9.1	-1.1	-1.2
Inhalants, 30 Days	3.2	5.0	2.7	4.0	-0.5	-1.0

Notes: 1999 survey results are reported in "The 1999 New Jersey Middle School Survey: A Statewide Report" (p.14). A "\*" indicates that data were not collected for that drug and/or prevalence-of-use period in that survey year.

Table 55. Comparison of ATOD prevalence-of-use among 8<sup>th</sup> graders for the full sample and the nine-school subsample, for surveys conducted in 1999 and 2001.

	1999		2001		Change	
	Full Sample	Nine Schools	Full Sample	Nine Schools	Full Sample	Nine Schools
	%	%	%	%		
Alcohol, Lifetime	58.0	58.4	53.3	53.2	-4.7	-5.2
Alcohol, Annual	50.8	52.6	39.3	40.0	-11.5	-12.6
Alcohol, 30 Days	30.2	28.4	21.7	22.8	-8.5	-5.6
Alcohol, Binge Drinking	12.6	12.9	9.8	11.2	-2.8	-1.7
Cigarettes, Lifetime	44.6	46.1	31.5	34.5	-13.1	-11.6
Cigarettes, Annual	23.9	28.4	16.5	20.1	-7.4	-8.3
Cigarettes, 30 Days	15.8	19.1	10.2	13.0	-5.6	-6.1
Smokeless Tobacco, Lifetime	8.8	9.3	5.3	5.6	-3.5	-3.7
Smokeless Tobacco, Annual	*	*	4.4	*	*	*
Smokeless Tobacco, 30 Days	3.1	2.8	2.7	2.2	-0.4	-0.6
Marijuana, Lifetime	16.3	18.1	9.7	11.8	-6.6	-6.3
Marijuana, Annual	14.0	16.4	7.8	8.9	-6.2	-7.5
Marijuana, 30 Days	9.9	11.2	4.7	5.7	-5.2	-5.5
Inhalants, Lifetime	7.6	12.2	9.4	8.1	1.8	-4.1
Inhalants, Annual	6.1	8.7	5.0	4.0	-1.1	-4.7
Inhalants, 30 Days	3.2	3.6	2.7	2.3	-0.5	-1.3

Notes: 1999 survey results are reported in “The 1999 New Jersey Middle School Survey: A Statewide Report” (p.14). A “\*” indicates that data were not collected for that drug and/or prevalence-of-use period in that survey year.

## Appendix A. References

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## Appendix B. 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)

Developmental Research & Programs, Inc. [www.drp.org](http://www.drp.org)

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

### *Prevention Program Guides*

Communities That Care<sup>®</sup>, Prevention Strategies: A Research Guide to What Works.

Developmental Research and Programs, Inc. (2000).

Sloboda, Z., and David, S. L. Preventing Drug Use among Children and Adolescents. A Research-Based Guide. National Institute on Drug Abuse, National Institutes of Health (1997).

Blueprint Programs [www.colorado.edu/cspv/blueprints](http://www.colorado.edu/cspv/blueprints)

### *Prevention Planning*

Hawkins, J. D., Catalano, R. F., & Associates (1992). *Communities That Care<sup>®</sup>: Action for Drug Abuse Prevention* (1<sup>st</sup> ed.). San Francisco: Jossey-Bass Publishers.

## Appendix C. Risk and Protective Factor Matrix

	Risk Factor Addressed	Program Strategy	Protective Factor					Developmental Period
			Healthy Beliefs & Clear Standards	Bonding	Opport.	Skills	Recog.	
<b>Community Domain</b>	<b>Availability of Drugs</b>	Community/School Policies	✓	✓	✓	✓	✓	all
	<b>Availability of Firearms</b>	Community/School Policies	✓					all
	<b>Community Laws and Norms Favorable toward Drug Use</b>	Classroom Curricula for Social and Emotional Competence Promotion	✓		✓			6-14
		Community Mobilization	✓	✓	✓	✓	✓	all
		Community/School Policies	✓	✓	✓	✓	✓	all
		Policing Strategies	✓					all
	<b>Media Portrayals of Violence</b>							
	<b>Transitions and Mobility</b>	Organizational Change in Schools	✓	✓	✓	✓	✓	6-18
	<b>Low Neighborhood Attachment and Community Disorganization</b>	Community Mobilization	✓	✓	✓	✓	✓	all
		Policing Strategies	✓					all
		Organizational Change in Schools	✓	✓	✓	✓	✓	all
		Classroom Curricula for Social and Emotional Competence Promotion	✓		✓	✓		11-14
	<b>Extreme Economic Deprivation</b>	Prenatal and Infancy Programs	✓	✓	✓	✓	✓	prenatal-3
Youth Employment with Education		✓	✓	✓	✓	✓	all	

Appendix C. Risk and Protective Factor Matrix (cont.)

	Risk Factor Addressed	Program Strategy	Protective Factor					Developmental Period
			Healthy Beliefs & Clear Standards	Bonding	Opport.	Skills	Recog.	
<b>Family Domain</b>	<b>Family History of Antisocial Behavior</b>	Prenatal/Infancy Programs	✓	✓	✓	✓	✓	prenatal-2
	<b>Family Management Problems</b>	Prenatal/Infancy Programs	✓	✓	✓	✓	✓	prenatal-2
		Early Childhood Education	✓	✓	✓	✓	✓	3-5
		Parent Training	✓	✓	✓	✓	✓	prenatal-14
		Family Therapy	✓	✓	✓	✓	✓	6-14
	<b>Family Conflict</b>	Marital Therapy	✓	✓	✓	✓	✓	prenatal
		Prenatal/Infancy Programs	✓	✓	✓	✓	✓	prenatal-2
		Parent Training	✓	✓	✓	✓	✓	prenatal-14
		Family Therapy	✓	✓	✓	✓	✓	6-14
	<b>Favorable Parental Attitudes toward and Involvement in Antisocial Behavior</b>	Prenatal/Infancy Programs	✓	✓	✓	✓	✓	prenatal-2
		Parent Training	✓	✓	✓	✓	✓	prenatal-14
		Community/School Policies	✓	✓	✓	✓	✓	all

Appendix C. Risk and Protective Factor Matrix (cont.)

Risk Factor Addressed		Protective Factor						Developmental Period
		Program Strategy	Healthy Beliefs & Clear Standards	Bonding	Opport.	Skills	Recog.	
<b>School Domain</b>	<b>Poor Academic Performance</b>	Prenatal/Infancy Programs	✓	✓	✓	✓	✓	prenatal-10
		Early Childhood Education	✓	✓	✓	✓	✓	3-5
		Parent Training	✓	✓	✓	✓	✓	prenatal-10
		Organizational Change in Schools	✓	✓	✓	✓	✓	6-18
		Classroom Organization, Management and Instructional Strategies	✓	✓	✓	✓	✓	6-18
		Classroom Curricula for Social and Emotional Competence Promotion	✓	✓	✓	✓	✓	6-14
		School Behavior Management Strategies	✓		✓		✓	6-14
		Youth Employment with Education	✓	✓	✓	✓	✓	15-21
	<b>Lack of Commitment to School</b>	Early Childhood Education	✓	✓	✓	✓	✓	3-5
		Organizational Change in Schools	✓	✓	✓	✓	✓	6-18
		Classroom Organization, Management, and Instructional Strategies	✓	✓	✓	✓	✓	6-18
		School Behavior Management Strategies	✓		✓		✓	6-14
		Mentoring	✓		✓		✓	11-18
		Youth Employment with Education	✓	✓	✓	✓	✓	15-21

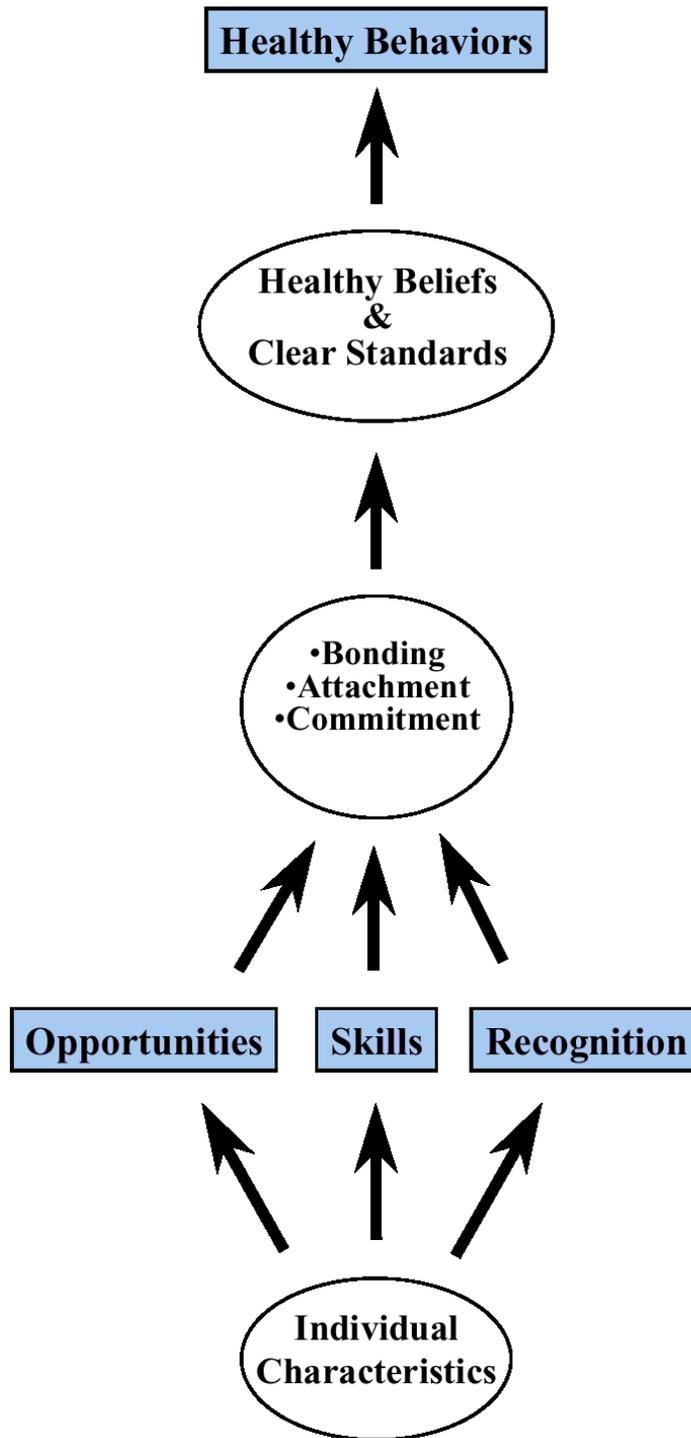
Appendix C. Risk and Protective Factor Matrix (cont.)

	Risk Factor Addressed	Program Strategy	Protective Factor					Developmental Period
			Healthy Beliefs & Clear Standards	Bonding	Opport.	Skills	Recog.	
<b>Peer-Individual Domain</b>	<b>Rebelliousness</b>	Family Therapy	✓	✓	✓	✓	✓	6-14
		Classroom Curricula for Social and Emotional Competence Promotion	✓	✓	✓	✓		6-14
		School Behavior Management Strategies	✓		✓		✓	6-14
		After-School Recreation	✓	✓	✓	✓	✓	6-10
		Mentoring	✓		✓		✓	11-18
		Youth Employment with Education	✓	✓	✓	✓	✓	15-18
	<b>Friends Who Engage in the Problem Behavior</b>	Parent Training	✓	✓	✓	✓	✓	6-14
		Classroom Curricula for Social and Emotional Competence Promotion	✓	✓	✓	✓	✓	6-14
		After-School Recreation	✓	✓	✓	✓	✓	6-14
		Mentoring	✓		✓		✓	11-18
	<b>Favorable Attitudes toward the Problem Behavior</b>	Classroom Curricula for Social and Emotional Competence Promotion	✓	✓	✓	✓	✓	6-14
		Community/School Policies						

Appendix C. Risk and Protective Factor Matrix (cont.)

		Protective Factor						
Risk Factor Addressed		Program Strategy	Healthy Beliefs & Clear Standards	Bonding	Opport.	Skills	Recog.	Developmental Period
<b>Peer-Individual Domain</b>	<b>Early Initiation (of Drug Use and Antisocial Behavior)</b>	Early Childhood Education	✓	✓	✓	✓	✓	3-5
		Parent Training	✓	✓	✓	✓	✓	prenatal-10
		Family Therapy	✓	✓	✓	✓	✓	6-18
		Classroom Organization, Management and Instructional Strategies	✓	✓	✓	✓	✓	6-18
		Classroom Curricula for Social and Emotional Competence Promotion	✓	✓	✓	✓	✓	6-14
		School Behavior Management Strategies	✓		✓		✓	6-14
		After-School Recreation Programs	✓	✓	✓	✓	✓	6-10
		Mentoring with Contingent Reinforcement	✓		✓		✓	11-18
		Community/School Policies	✓					all
	<b>Constitutional Factors</b>	Prenatal/Infancy Programs	✓	✓	✓	✓	✓	prenatal-2

## Appendix D. The Social Development Strategy





These questions ask for some general information about the people completing the survey. Please mark the response that best describes you.

**1. How old are you?**

- 10    12    14    16  
 11    13    15    17 or older

**2. What grade are you in?**

- 7th    8th

**3. Are you:**

- Female    Male

**4. What do you consider yourself to be? (Choose all that apply.)**

- White  
 Black or African American  
 American Indian or Alaskan Native  
 Spanish/Hispanic/Latino  
      Mexican American    Chicano  
      Mexican    Puerto Rican  
      Cuban    Central or South American  
      Other Spanish  
 Asian  
 Native Hawaiian or other Pacific Islander  
 Other (Please specify) \_\_\_\_\_

**5. Think of where you live most of the time. Which of the following people live there with you? (Choose all that apply.)**

- Mother    Father  
 Stepmother    Stepfather  
 Foster Mother    Foster Father  
 Grandmother    Grandfather  
 Aunt    Uncle  
 Sister(s)    Brother(s)  
 Stepsister(s)    Stepbrother(s)  
 Other children    Other Adults

**6. How many brothers and sisters, including stepbrothers and stepsisters, do you have that are older than you?**

- 0    2    4    6 or more  
 1    3    5

**7. How many brothers or sisters, including stepbrothers and stepsisters, do you have that are the same age or younger than you?**

- 0    2    4    6 or more  
 1    3    5

**8. What is the language you use most often at home?**

- English    Another Language  
 Spanish

**9. What is the zip code where you live?**

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

**10. Where are you living now?**

- On a farm  
 In the country, not on a farm  
 In a city, town, or suburb

This section asks about your experiences at school.

**11. Putting them all together, what were your grades like last year?**

- Mostly F's  
 Mostly D's  
 Mostly C's  
 Mostly B's  
 Mostly A's

PLEASE DO NOT WRITE IN THIS AREA

12. During the LAST FOUR WEEKS how many whole days of school have you missed . . .

	None	1 day	2 days	3 days	4-5 days	6-10 days	11 or more days
a. because of illness	<input type="radio"/>						
b. because you skipped or "cut"	<input type="radio"/>						
c. for other reasons	<input type="radio"/>						

23. How often do you feel that the school work you are assigned is meaningful and important?

- Almost Always
- Often
- Sometimes
- Seldom
- Never

24. How interesting are most of your courses to you?

- Very interesting and stimulating
- Quite interesting
- Fairly interesting
- Slightly dull
- Very dull

25. How important do you think the things you are learning in school are going to be for your later life?

- Very important
- Quite important
- Fairly important
- Slightly important
- Not at all important

13. In my school, students have lots of chances to help decide things like class activities and rules.

	NO!	no	yes	YES!
13. In my school, students have lots of chances to help decide things like class activities and rules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Teachers ask me to work on special classroom projects.

14. Teachers ask me to work on special classroom projects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
--	-----------------------	-----------------------	-----------------------	-----------------------

15. My teachers notice when I am doing a good job and let me know about it.

15. My teachers notice when I am doing a good job and let me know about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
---	-----------------------	-----------------------	-----------------------	-----------------------

16. There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.

16. There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
---	-----------------------	-----------------------	-----------------------	-----------------------

17. There are lots of chances for students in my school to talk with a teacher one-to-one.

17. There are lots of chances for students in my school to talk with a teacher one-to-one.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
--	-----------------------	-----------------------	-----------------------	-----------------------

18. I feel safe at my school.

18. I feel safe at my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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19. The school lets my parents know when I have done something well.

19. The school lets my parents know when I have done something well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
--	-----------------------	-----------------------	-----------------------	-----------------------

20. My teachers praise me when I work hard in school.

20. My teachers praise me when I work hard in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
---	-----------------------	-----------------------	-----------------------	-----------------------

21. Are your school grades better than the grades of most students in your class?

21. Are your school grades better than the grades of most students in your class?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
---	-----------------------	-----------------------	-----------------------	-----------------------

22. I have lots of chances to be part of class discussions or activities.

22. I have lots of chances to be part of class discussions or activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
---	-----------------------	-----------------------	-----------------------	-----------------------

26. Now, thinking back over the past year in school, how often did you . . .

	Never	Seldom	Sometimes	Often	Almost Always
a. enjoy being in school?	<input type="radio"/>				
b. hate being in school?	<input type="radio"/>				
c. try to do your best work in school?	<input type="radio"/>				

❖ 3 ❖

These questions ask about your feelings and experiences in other parts of your life.

27. Think of your **four best friends** (the friends you feel closest to). In the past year (12 months), how many of your best friends have:

	None	1	2	3	4
a. smoked cigarettes?	<input type="radio"/>				
b. tried beer, wine or hard liquor (for example, vodka, whiskey or gin) when their parents didn't know about it?	<input type="radio"/>				
c. used marijuana?	<input type="radio"/>				
d. used LSD, cocaine, amphetamines, or other illegal drugs?	<input type="radio"/>				
e. been suspended from school?	<input type="radio"/>				
f. carried a handgun?	<input type="radio"/>				
g. sold illegal drugs?	<input type="radio"/>				
h. stolen or tried to steal a motor vehicle such as a car or motorcycle?	<input type="radio"/>				
i. been arrested?	<input type="radio"/>				
j. dropped out of school?	<input type="radio"/>				
k. been members of a gang?	<input type="radio"/>				

28. How old were you when you first:

	Never Have	10 or Younger	11	12	13	14	15	16	17 or Older
a. smoked marijuana?	<input type="radio"/>								
b. smoked a cigarette, even just a puff?	<input type="radio"/>								
c. had more than a sip or two of beer, wine or hard liquor (for example, vodka, whiskey or gin)?	<input type="radio"/>								
d. began drinking alcoholic beverages regularly, that is, at least once or twice a month?	<input type="radio"/>								
e. got suspended from school?	<input type="radio"/>								
f. got arrested?	<input type="radio"/>								
g. carried a handgun?	<input type="radio"/>								
h. attacked someone with the idea of seriously hurting them?	<input type="radio"/>								
i. belonged to a gang?	<input type="radio"/>								

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

	Very Wrong	Wrong	A Little Bit Wrong	Not Wrong at All
a. take a handgun to school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. steal something worth more than \$5?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. pick a fight with someone?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. attack someone with the idea of seriously hurting them?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

◆ 4 ◆

	Not Wrong at All				
	A Little Bit Wrong				
	Wrong				
	Very Wrong				
e. stay away from school all day when their parents think they are at school?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. smoke cigarettes?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. smoke marijuana?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. use LSD, cocaine, amphetamines or another illegal drug?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. I ignore rules that get in my way.

Very False  
 Somewhat False  
 Somewhat True  
 Very True

31. It is all right to beat up people if they start the fight.

NO!     no     yes     YES!

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

NO!     no     yes     YES!

33. I do the opposite of what people tell me, just to get them mad.

Very False  
 Somewhat False  
 Somewhat True  
 Very True

34. I think it is okay to take something without asking if you can get away with it.

NO!     no     yes     YES!

35. How many times have you done the following things?

	Once a week or more				
	2 or 3 times a month				
	About once a month				
	Less than once a month				
	I've done it, but not in the past year				
	Never				
a. Done what feels good no matter what.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Done something dangerous because someone dared you to do it.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Done crazy things even if they are a little dangerous.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

36. Have you ever belonged to a gang?

Yes     No

37. If you have ever belonged to a gang, did the gang have a name?

No     Yes     I never belonged to a gang

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

	40+ Times				
	30 to 39 Times				
	20 to 29 Times				
	10 to 19 Times				
	6 to 9 Times				
	3 to 5 Times				
	1 or 2 Times				
	Never				
a. been suspended from school?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. carried a handgun?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. sold illegal drugs?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. stolen or tried to steal a motor vehicle such as a car or motorcycle?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. been arrested?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. attacked someone with the idea of seriously hurting them?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. been drunk or high at school?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. taken a handgun to school?		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. What are chances you would be seen as cool if you:

	Very Good Chance	Pretty Good Chance	Some Chance	Little Chance	No or Very Little Chance
a. smoked cigarettes?	<input type="radio"/>				
b. began drinking alcoholic beverages regularly, that is, at least once or twice a month?	<input type="radio"/>				
c. smoked marijuana?	<input type="radio"/>				
d. carried a handgun?	<input type="radio"/>				

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

- Ignore her
- Grab a CD and leave the store
- Tell her to put the CD back
- Act like it's a joke, and ask her to put the CD back

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

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

42. 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 say or do?

- Push the person back
- Say "Excuse me" and keep on walking
- Say "Watch where you are going" and keep on walking
- Swear at the person and walk away

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

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

44. I think sometimes it's okay to cheat at school.

- NO!
- no
- yes
- YES!

45. How often do you attend religious services or activities?

- Never
- Rarely
- 1-2 Times a Month
- About Once a Week or More

46. I like to see how much I can get away with.

- Very False
- Somewhat False
- Somewhat True
- Very True

	NO!	no	yes	YES!
47. It is important to think before you act.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Do you have to have everything right away?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Do you often switch from activity to activity rather than sticking to one thing at a time?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. I often do things without thinking about what will happen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Sometimes I think that life is not worth it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. At times I think I am no good at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. All in all, I am inclined to think that I am a failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. In the past year have you felt depressed or sad MOST days, even if you felt OK sometimes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

◆ 6 ◆

55. How much do you think people risk harming themselves (physically or in other ways) if they:

	Great Risk	Moderate Risk	Slight Risk	No Risk
a. smoke one or more packs of cigarettes per day?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. try marijuana once or twice?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. smoke marijuana regularly?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. sniff glue, breathe the contents of an aerosol spray can, or inhale other gases or sprays, in order to get high?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The next section asks your experience with tobacco, alcohol, and other drugs. Remember, your answers are confidential.

56. Have you ever used smokeless tobacco (chew, snuff, plug, dipping tobacco, chewing tobacco)?

- Never
- Once or twice
- Once in a while but not regularly
- Regularly in the past
- Regularly now

57. How frequently have you used smokeless tobacco...

	Not at all	Once or twice	Once or twice per week	About once a day	More than once a day
a. ...in the past 12 months?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...in the past 30 days?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

58. Have you ever smoked cigarettes?

- Never
- Once or twice
- Once in a while but not regularly
- Regularly in the past
- Regularly now

59. How frequently have you smoked cigarettes ...

	Not at all	Less than one cigarette per day	One to five cigarettes per day	About one-half pack per day	About one pack per day	About one and one-half packs per day	Two or more packs per day
a. ...in the past 12 months?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ...in the past 30 days?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

60. Have you ever smoked Bidis or "Beedies" even one or two puffs?

- Never
- Once or twice
- Once in a while but not regularly
- Regularly in the past
- Regularly now

61. On how many occasions have you smoked Bidis or "Beedies"...

	0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More Occasions
a. ...in the past 12 months?	<input type="radio"/>						
b. ...in the past 30 days?	<input type="radio"/>						

62. Have you ever smoked Kreteks or Clove Cigarettes?

- Never
- Once or twice
- Once in a while but not regularly
- Regularly in the past
- Regularly now

63. On how many occasions have you smoked Kreteks or Clove Cigarettes...

	0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More Occasions
a. ...in the past 12 months?	<input type="radio"/>						
b. ...in the past 30 days?	<input type="radio"/>						

◆ 7 ◆



These questions ask about the neighborhood and community where you live.

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

- Very Hard
- Sort of Hard
- Sort of Easy
- Very Easy

75. Where do you usually get your alcoholic beverages from?

- From home
- From liquor stores
- From friends
- From bars/restaurants/lounges
- Other
- I don't drink

76. If you wanted to get some cigarettes, how easy would it be for you to get some?

- Very Hard
- Sort of Hard
- Sort of Easy
- Very Easy

77. How do you usually get the cigarettes you smoke?

- From vending machines
- I buy them over the counter
- Someone else buys them for me
- From home
- From friends
- Other
- I don't smoke

78. If a kid smoked marijuana in your neighborhood would he or she be caught by the police?

- NO!
- no
- yes
- YES!

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

- Very Hard
- Sort of Hard
- Sort of Easy
- Very Easy

80. If a kid drank some beer, wine or hard liquor (for example, vodka, whiskey or gin) in your neighborhood would he or she be caught by the police?

- NO!
- no
- yes
- YES!

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

- Very Hard
- Sort of Hard
- Sort of Easy
- Very Easy

82. If a kid carried a handgun in your neighborhood would he or she be caught by the police?

- NO!
- no
- yes
- YES!

83. If you wanted to get some marijuana, how easy would it be for you to get some?

- Very Hard
- Sort of Hard
- Sort of Easy
- Very Easy

84. How wrong would most adults in your neighborhood think it is for kids your age:

	Very Wrong	Wrong	A Little Bit Wrong	Not Wrong at All
a. to use marijuana?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. to drink alcohol?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. to smoke cigarettes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. to sniff glue, breathe the contents of an aerosol spray can, or inhale other gases or sprays, in order to get high?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

85. About how many adults have you known personally who in the past year have:

	None	1 adult	2 adults	3 or 4 adults	5 or more adults
a. used marijuana, crack, cocaine, or other drugs?	<input type="radio"/>				
b. sold or dealt drugs?	<input type="radio"/>				
c. done other things that could get them in trouble with the police like stealing, selling stolen goods, mugging or assaulting others, etc.?	<input type="radio"/>				
d. gotten drunk or high?	<input type="radio"/>				



	NO!	no	yes	YES!
86. If I had to move, I would miss the neighborhood I now live in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
87. My neighbors notice when I am doing a good job and let me know about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
88. I like my neighborhood.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
89. There are lots of adults in my neighborhood I could talk to about something important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

90. How much do each of the following statements describe your neighborhood?

	NO!	no	yes	YES!
a. crime and/or drug selling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. fights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. lots of empty or abandoned buildings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. lots of graffiti	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

91. People move in and out of my neighborhood a lot.  
 NO!     no     yes     YES!

92. How many times have you changed homes since kindergarten?  
 Never  
 1 or 2 times  
 3 or 4 times  
 5 or 6 times  
 7 or more times

93. There are people in my neighborhood who are proud of me when I do something well.  
 NO!     no     yes     YES!

94. Which of the following activities for people your age are available in your community?

	Yes	No
a. sports teams	<input type="radio"/>	<input type="radio"/>
b. scouting	<input type="radio"/>	<input type="radio"/>
c. boys and girls clubs	<input type="radio"/>	<input type="radio"/>
d. 4-H clubs	<input type="radio"/>	<input type="radio"/>
e. service clubs	<input type="radio"/>	<input type="radio"/>

95. Have you changed schools in the past year?  
 No  
 Yes

96. I feel safe in my neighborhood.  
 NO!     no     yes     YES!

97. How many times have you changed schools since kindergarten?  
 Never  
 1 or 2 times  
 3 or 4 times  
 5 or 6 times  
 7 or more times

98. I'd like to get out of my neighborhood.  
 NO!     no     yes     YES!

99. Have you changed homes in the past year?  
 No  
 Yes

100. There are people in my neighborhood who encourage me to do my best.  
 NO!     no     yes     YES!

The next few questions ask about your family.

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

	Very Wrong	Wrong	A Little Bit Wrong	Not Wrong at All
a. drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly (at least once or twice a month)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. smoke cigarettes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. smoke marijuana?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. steal something worth more than \$5?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. draw graffiti, or write things or draw pictures on buildings or other property (without the owner's permission)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. pick a fight with someone?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

102. Have any of your brothers or sisters ever:

	No	Yes
a. drunk beer, wine or hard liquor (for example, vodka, whiskey or gin)?	<input type="radio"/>	<input type="radio"/>
b. smoked marijuana?	<input type="radio"/>	<input type="radio"/>
c. smoked cigarettes?	<input type="radio"/>	<input type="radio"/>
d. taken a handgun to school?	<input type="radio"/>	<input type="radio"/>
e. been suspended or expelled from school?	<input type="radio"/>	<input type="radio"/>

103. The rules in my family are clear.  
 NO!     no     yes     YES!

104. Has anyone in your family ever had a severe alcohol or drug problem?  
 No  
 Yes

	NO!	no	yes	YES!
105. People in my family often insult or yell at each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
106. When I am not at home, one of my parents knows where I am and who I am with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
107. We argue about the same things in my family over and over.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
108. My parents want me to call if I'm going to be late getting home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
109. If you drank some beer or wine or liquor (for example, vodka, whiskey or gin) without your parents' permission, would you be caught by your parents?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
110. My family has clear rules about alcohol and drug use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	NO!	no	yes	YES!
111. If you carried a handgun without your parent's permission, would you be caught by your parents?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
112. If you skipped school without your parent's permission, would you be caught by your parents?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

113. My parents notice when I am doing a good job and let me know about it.  
 Never or almost never  
 Sometimes  
 Often  
 All the time



## Appendix F. Risk and Protective Factors and Selected Associated Survey Items

Domain	Scale	Selected survey items
Community Domain Protective Factors	Community Opportunities for Prosocial Involvement	Which of the following activities for people your age are available in your community? Sports teams, scouting, boys and girls clubs, 4-H clubs, service clubs.
	Community Rewards for Prosocial Involvement	My neighbors notice when I am doing a good job and let me know.
Community Domain Risk Factors	Low Neighborhood Attachment and Community Disorganization	If I had to move, I would miss the neighborhood I now live in.  I feel safe in my neighborhood.
	Personal Transitions & Mobility	How many times have you changed homes since kindergarten?
	Community Transitions & Mobility	People move in and out of my neighborhood a lot.
	Laws and Norms (Favorable to Drug Use and Firearms)	If a kid drank some beer, wine or hard liquor in your neighborhood, would he or she be caught by the police?  How wrong would most adults in your neighborhood think it was for kids your age to drink alcohol?
	Perceived Availability (of Drugs and Firearms)	If you wanted to get some beer, wine or hard liquor, how easy would it be for you to get some?
Family Domain Protective Factors	Family Attachment	Do you share your thoughts and feelings with your mother?  Do you share your thoughts and feelings with your father?

**Appendix F. Risk and Protective Factors and Selected Associated Survey Items (cont.)**

Domain	Scale	Selected survey items
Family Domain Protective Factors (cont.)	Family Opportunities for Prosocial Involvement	My parents give me lots of chances to do fun things with them.
	Family Rewards for Prosocial Involvement	How often do your parents tell you they're proud of you for something you've done?
Family Domain Risk Factors	Poor Family Supervision	My parents ask if I've gotten my homework done.
	Poor Family Discipline	If you skipped school, would you be caught by your parents?
	Family Conflict	People in my family often insult or yell at each other.
	Family History of Antisocial Behavior	Has anyone in your family ever had a severe alcohol or drug problem?
	Parental Attitudes Favorable toward ATOD Use	How wrong do your parents feel it would be for <u>you</u> to smoke cigarettes?
	Parental Attitudes Favorable toward Antisocial Behavior	How wrong do your parents feel it would be for <u>you</u> to steal anything worth more than \$5?
School Domain Protective Factors	School Opportunities for Prosocial Involvement	There are lots of chances for students in my school to talk with a teacher one-on-one.
	School Rewards for Prosocial Involvement	My teachers praise me when I work hard in school.
School Domain Risk Factors	Poor Academic Performance	Putting them all together, what were your grades like last year?
	Low School Commitment	How interesting are most of your courses to you?

**Appendix F. Risk and Protective Factors and Selected Associated Survey Items (cont.)**

Domain	Scale	Selected survey items
Peer-Individual Domain Protective Factors	Religiosity	How often do you attend religious services or activities?
	Social Skills	Vignette about what the youth would do if she or he were handed an alcoholic beverage at a party.
	Belief in the Moral Order	It is important to be honest with your parents, even if they become upset or you get punished.
Peer-Individual Domain Risk Factors	Rebelliousness	I ignore rules that get in my way.
	Friends' Delinquent Behavior	Think of your <u>four best friends</u> . In the past year, how many of your best friends have dropped out of school?
	Friends' Use of Drugs	Think of your <u>four best friends</u> . In the past year, how many of your best friends have smoked cigarettes?
	Peer Rewards for Antisocial Behavior	What are the chances you would be seen as cool if you carried a handgun?
	Favorable Attitudes toward Antisocial Behavior	How wrong do you think it is for someone your age to pick a fight with someone?
	Favorable Attitudes toward ATOD Use	How wrong do you think it is for someone your age to smoke cigarettes?
	Low Perceived Risks of Drug Use	How much do you think people risk harming themselves (physically or in other ways) if they: smoke one or more packs of cigarettes per day?

**Appendix F. Risk and Protective Factors and Selected Associated Survey Items (cont.)**

Domain	Scale	Selected survey items
Peer-Individual Domain Risk Factors (cont.)	Early Initiation of Antisocial Behavior	How old were you when you first began drinking alcoholic beverages regularly, that is, at least once or twice a month?
	Impulsiveness	Do you have to have everything right away?
	Sensation Seeking	How many times have you done something dangerous because someone dared you to do it?

## **Appendix G.**

### **Boxplots Showing the Relationships between Risk and Protective Factors and ATOD Use and Delinquent Behaviors**

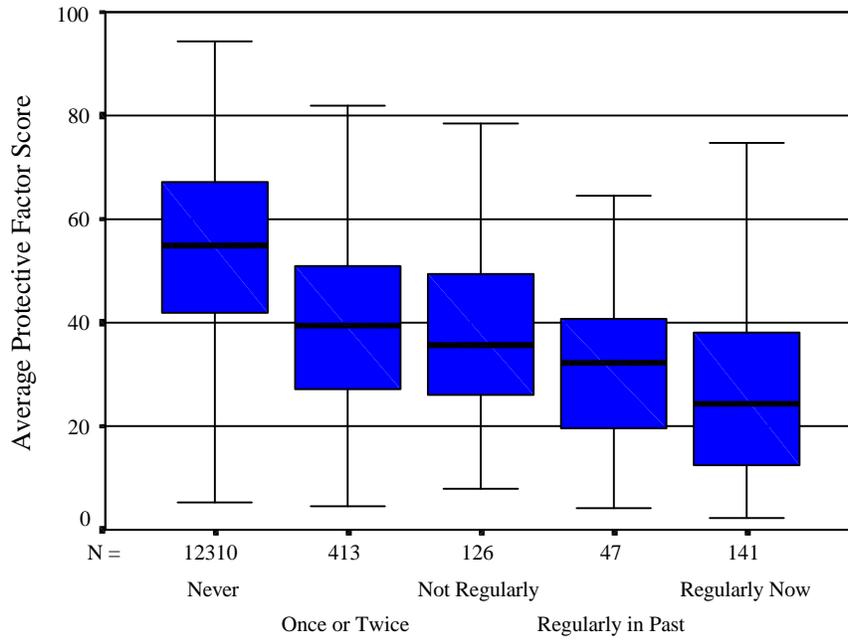


Figure F-1. Smokeless Tobacco, Use in Lifetime.

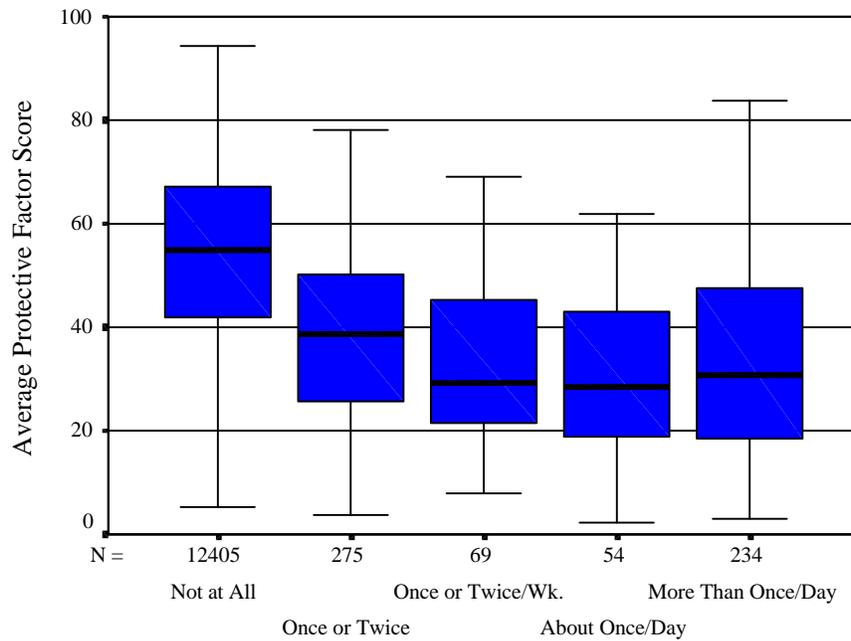


Figure F-2. Smokeless Tobacco, Use in Past Year.

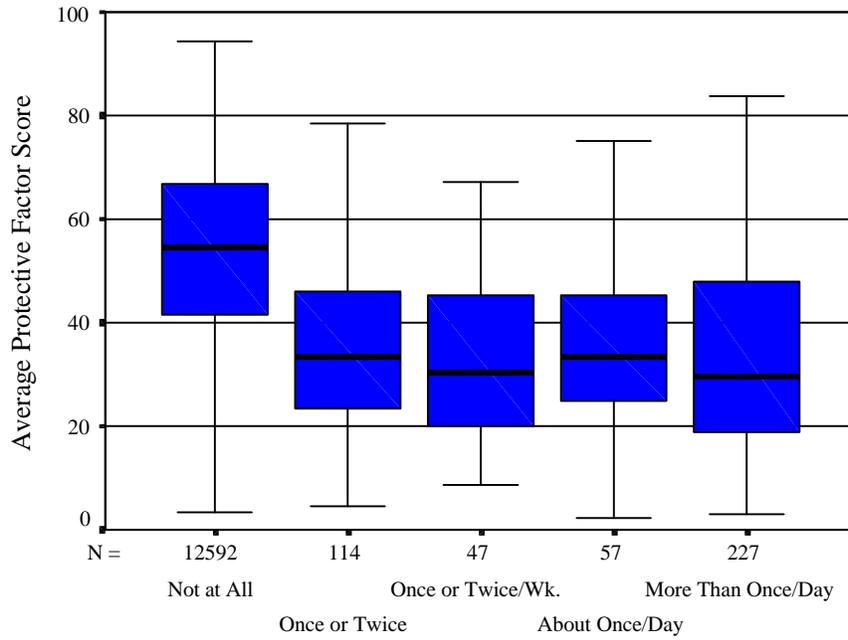


Figure F-3. Smokeless Tobacco, Use in Past 30 Days.

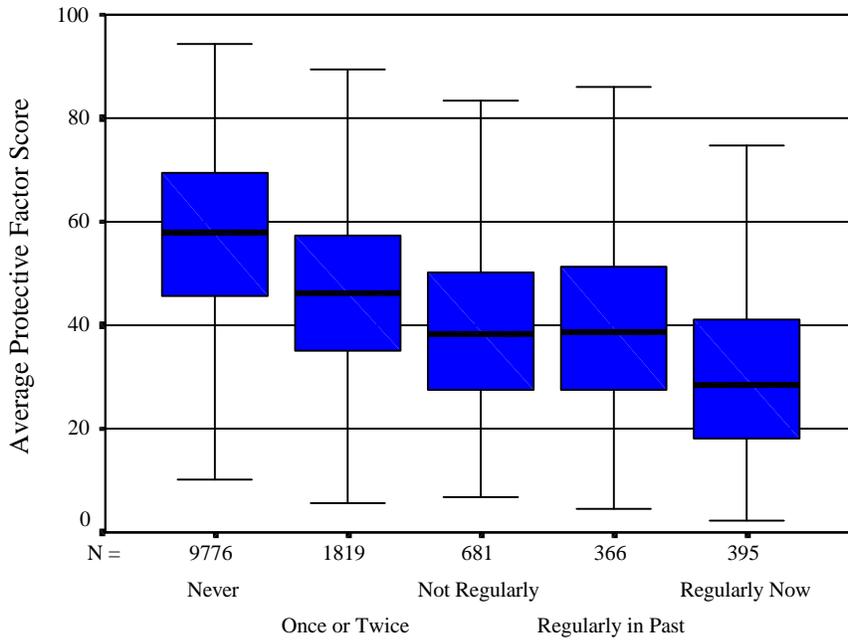


Figure F-4. Cigarettes, Use in Lifetime.

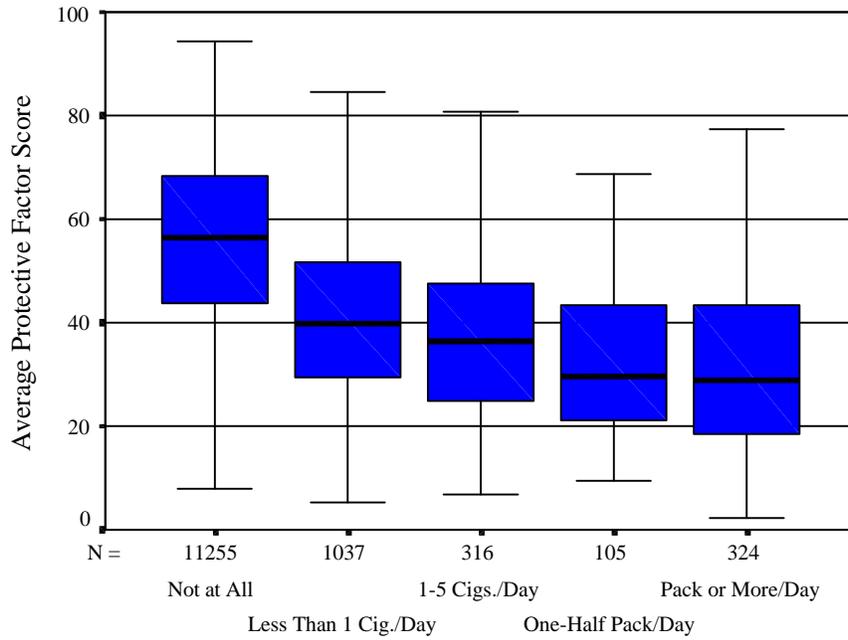


Figure F-5. Cigarettes, Use in Past Year.

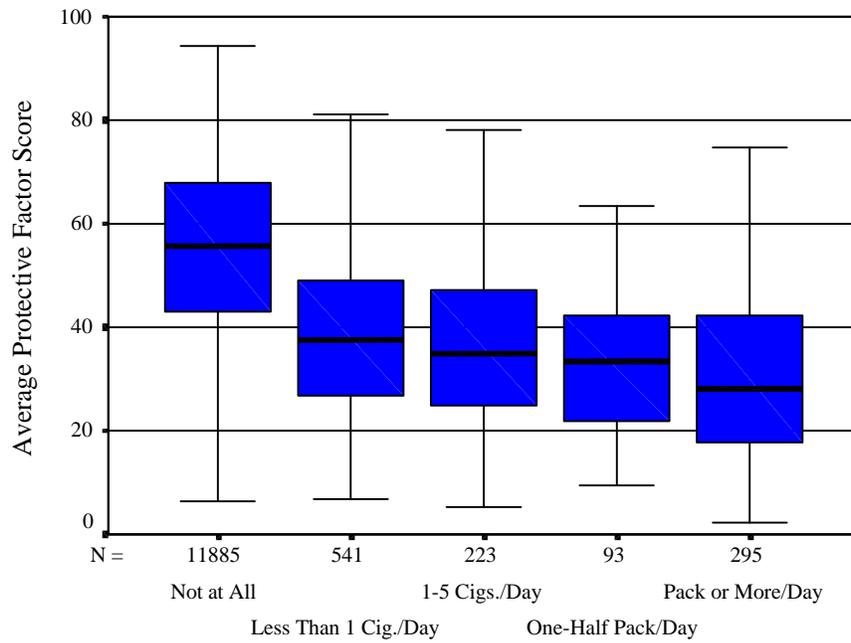


Figure F-6. Cigarettes, Use in Past 30 Days.

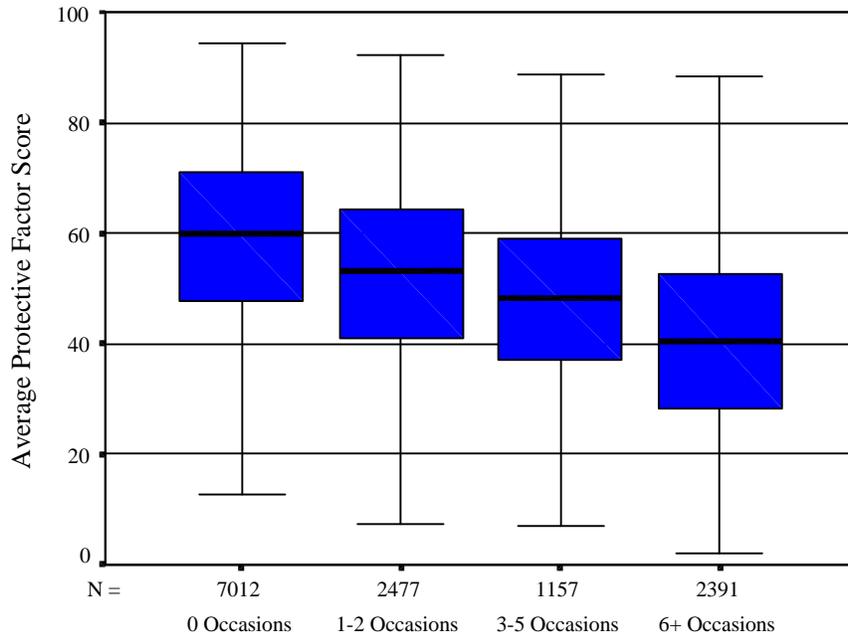


Figure F-7. Alcohol, Use in Lifetime.

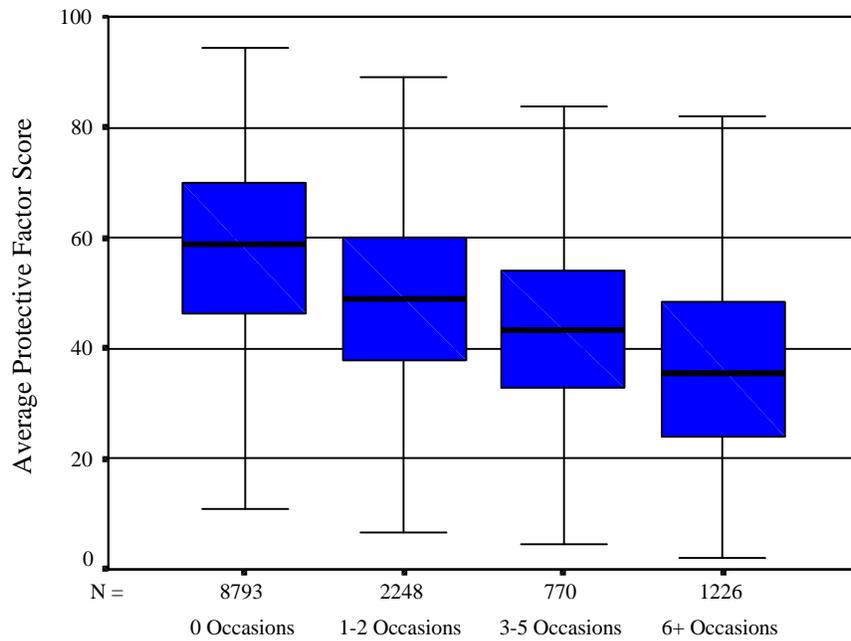


Figure F-8. Alcohol, Use in Past Year.

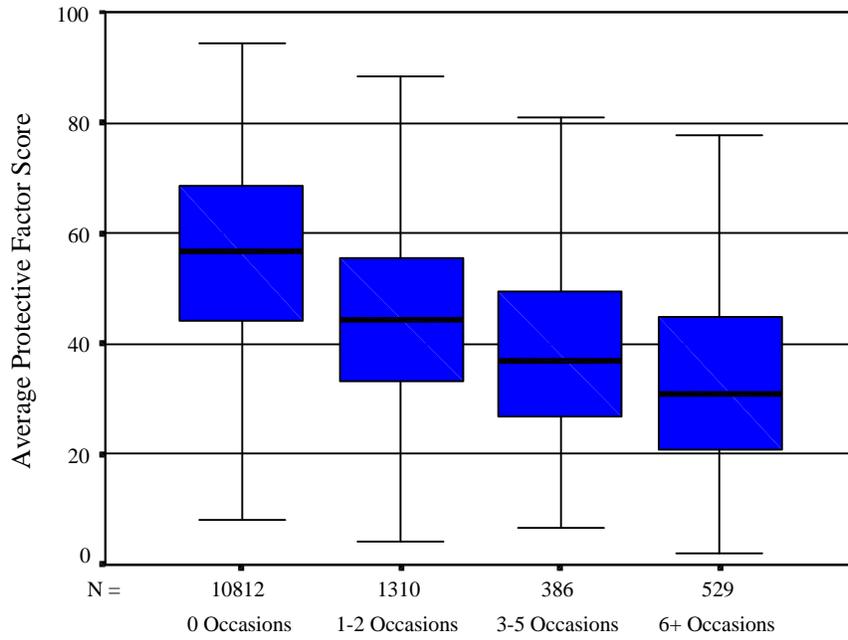


Figure F-9. Alcohol, Use in Past 30 Days.

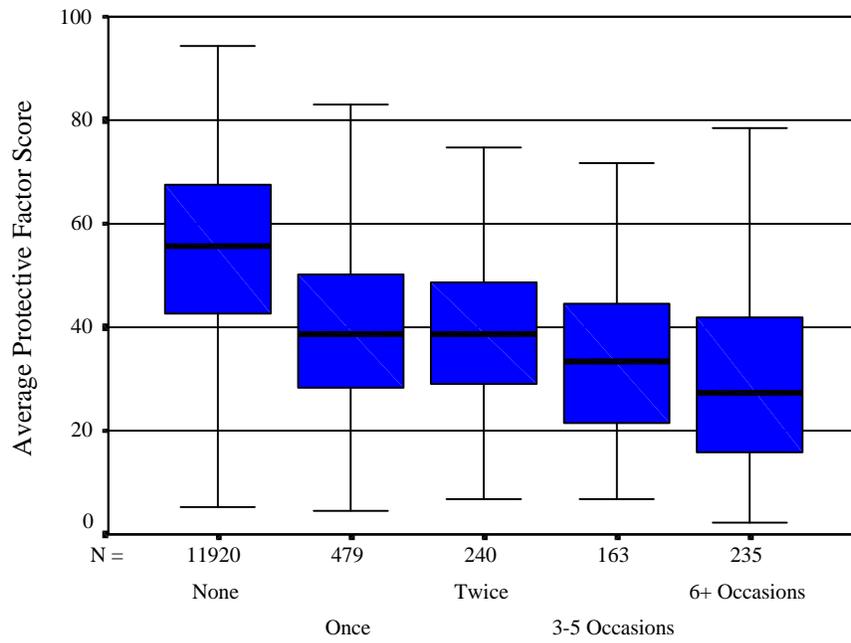


Figure F-10. Alcohol, Binge Drinking in Past Two Weeks.

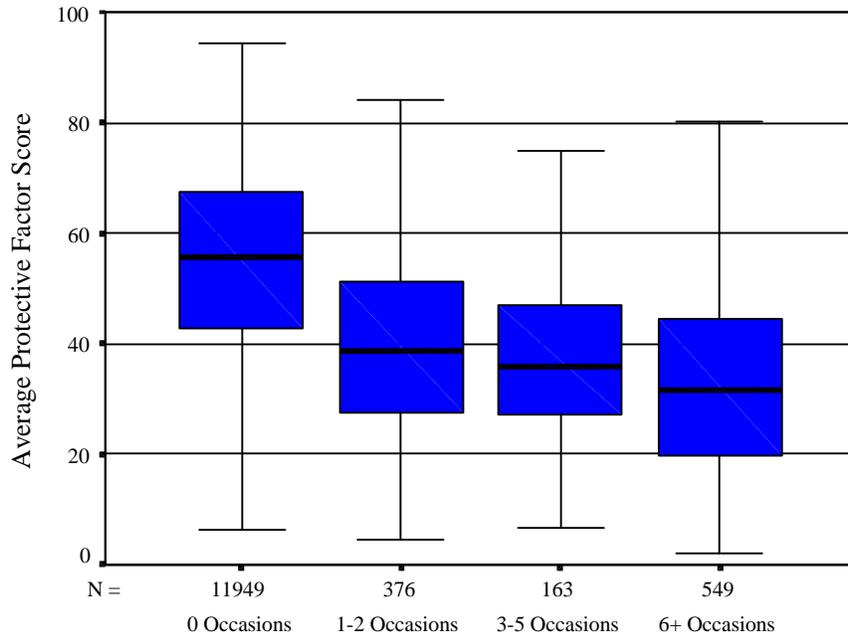


Figure F-11. Marijuana, Use in Lifetime.

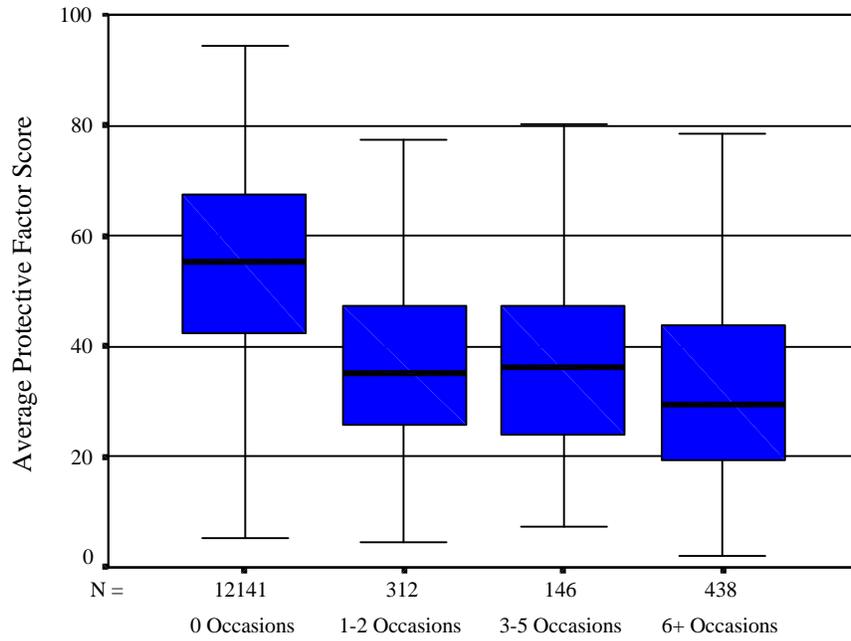


Figure F-12. Marijuana, Use in Past Year.

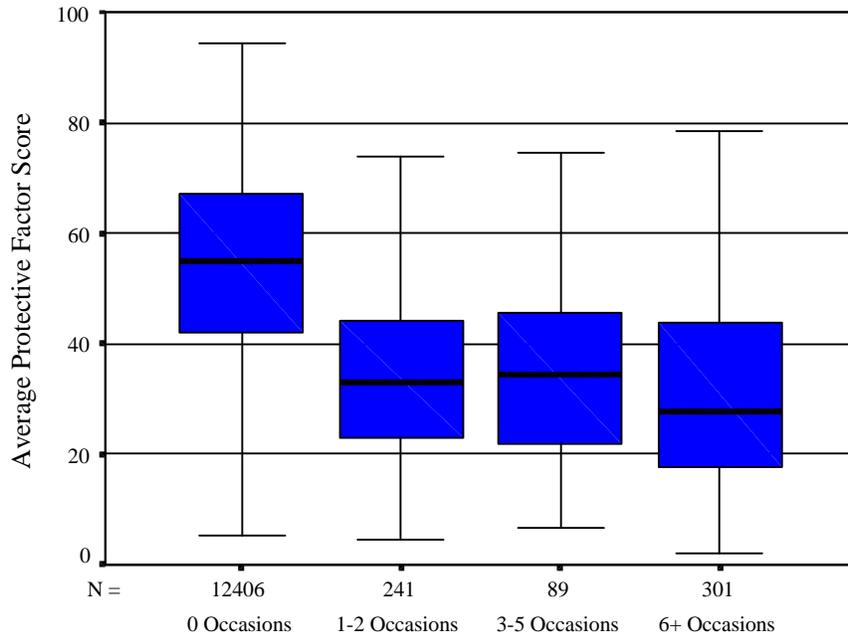


Figure F-13. Marijuana, Use in Past 30 Days.

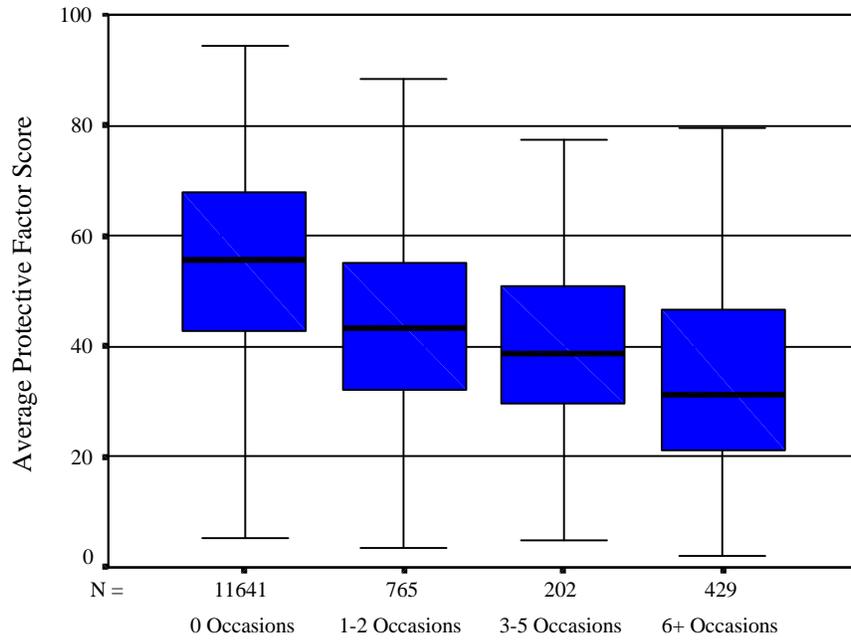


Figure F-14. Inhalants, Use in Lifetime.

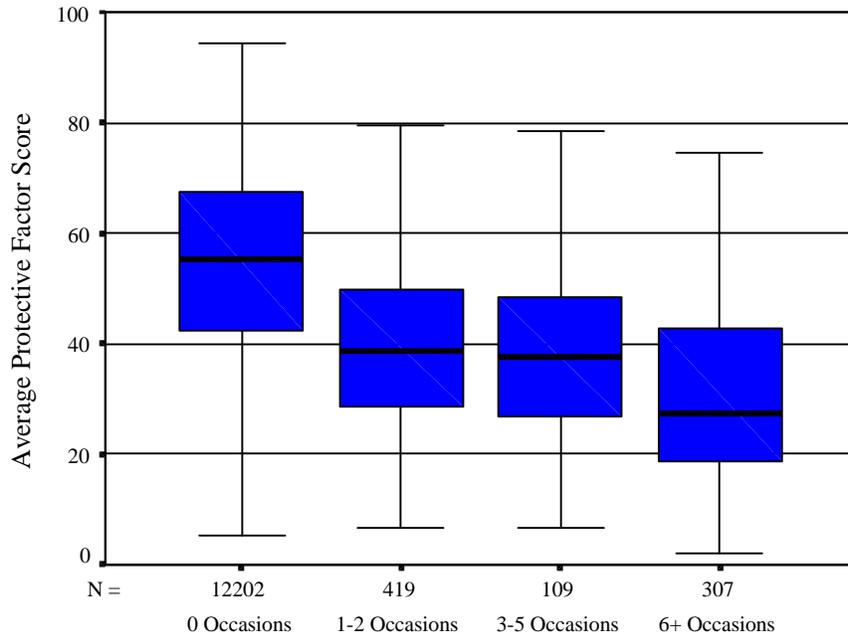


Figure F-15. Inhalants, Use in Past Year.

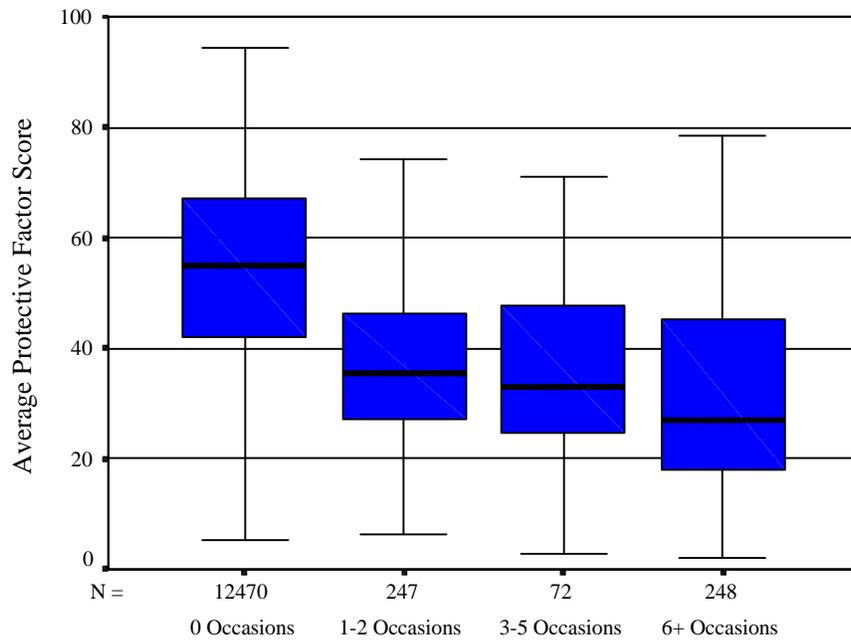


Figure F-16. Inhalants, Use in Past 30 Days.

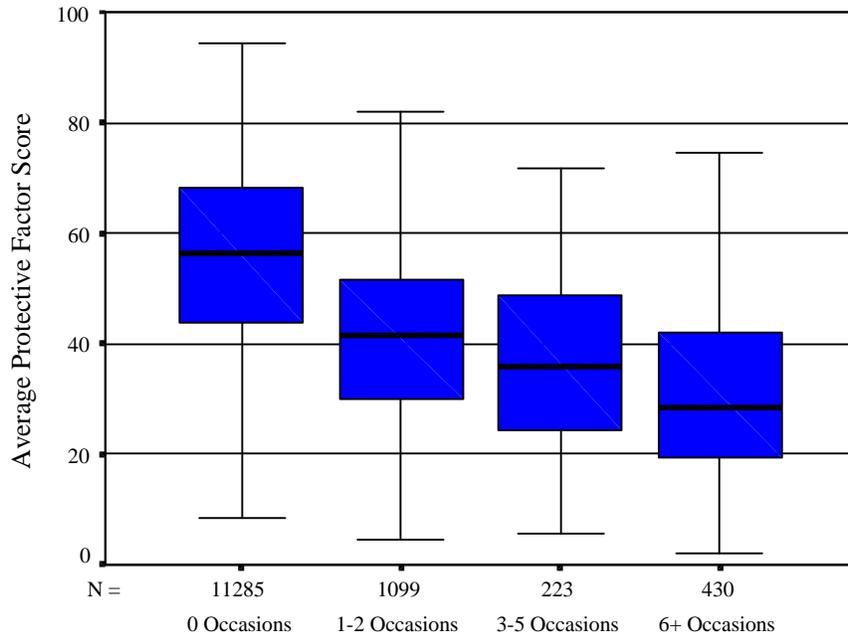


Figure F-17. Attacking Someone with Intent to Harm, Past Year.

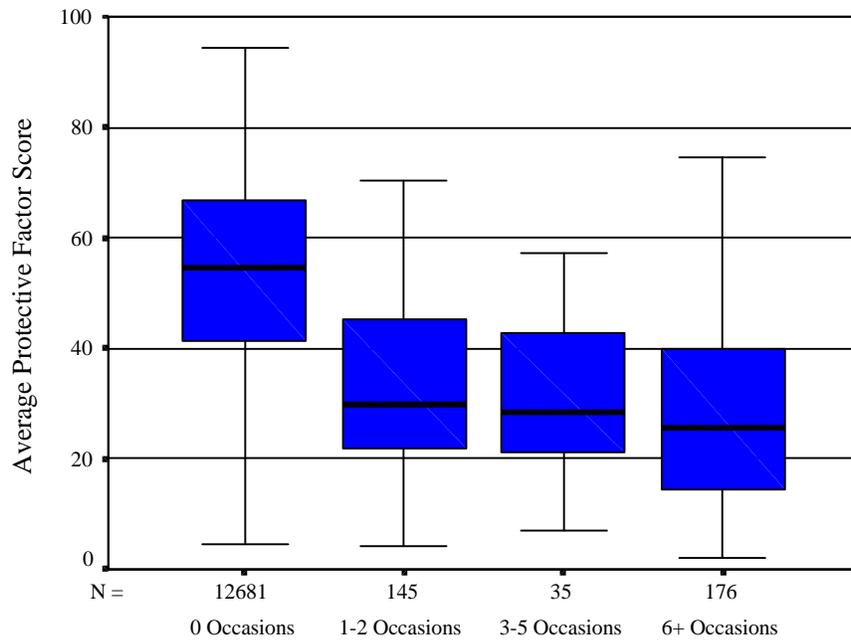


Figure F-18. Attempting to Steal a Vehicle, Past Year.

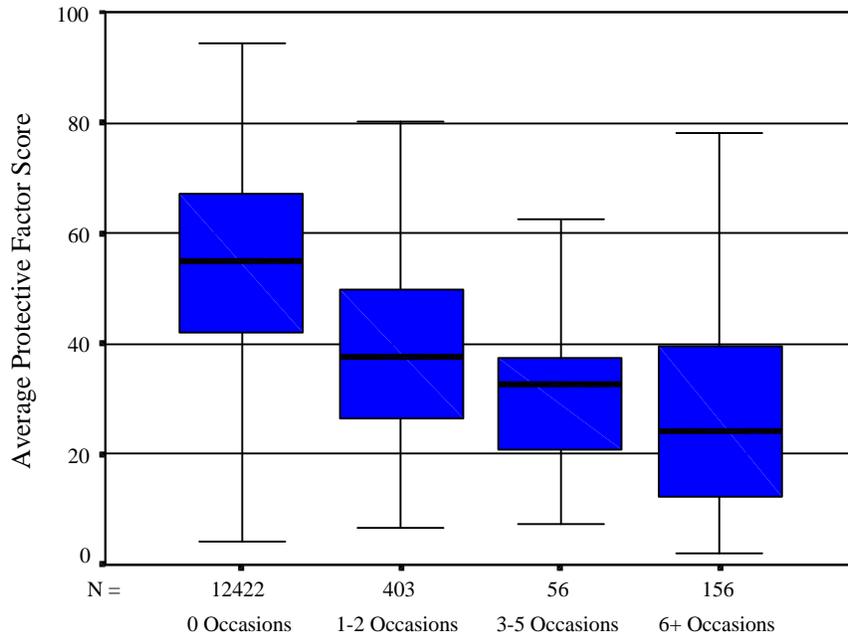


Figure F-19. Being Arrested, Past Year.

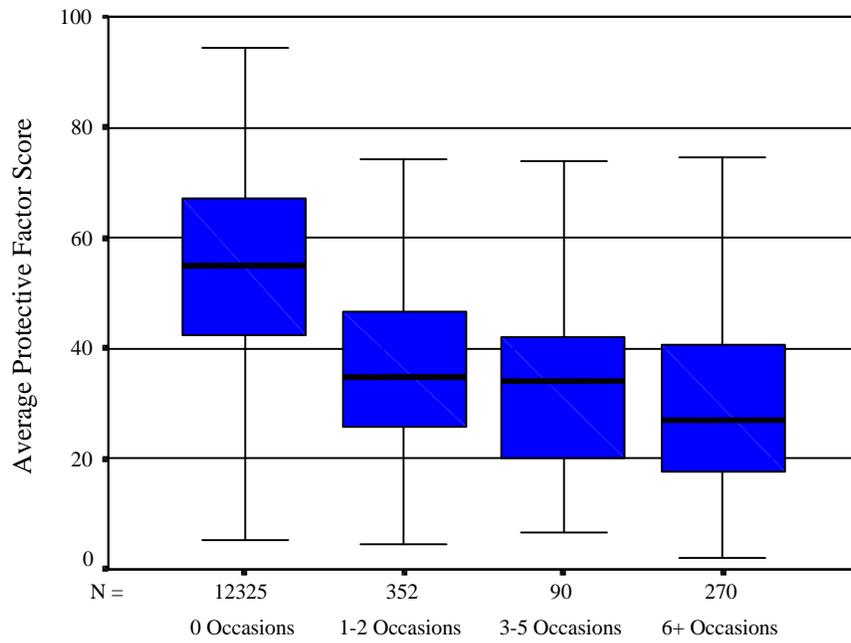


Figure F-20. Being Drunk or High at School, Past Year.

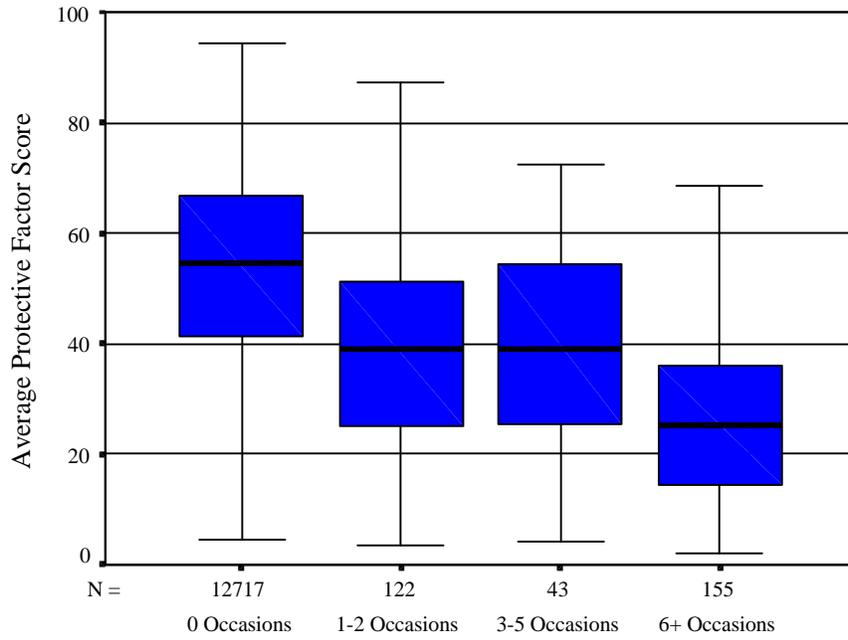


Figure F-21. Carrying a Handgun, Past Year.

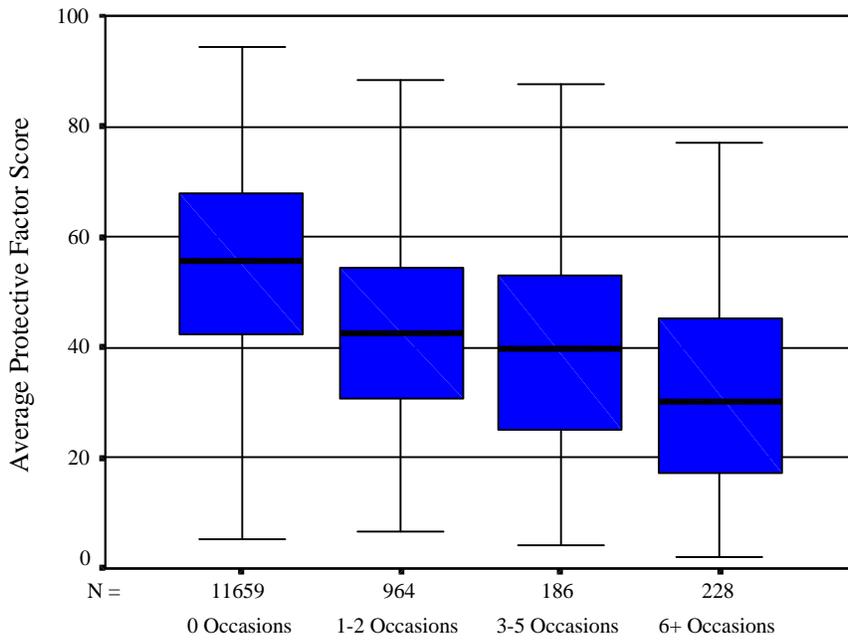


Figure F-22. Getting Suspended, Past Year.

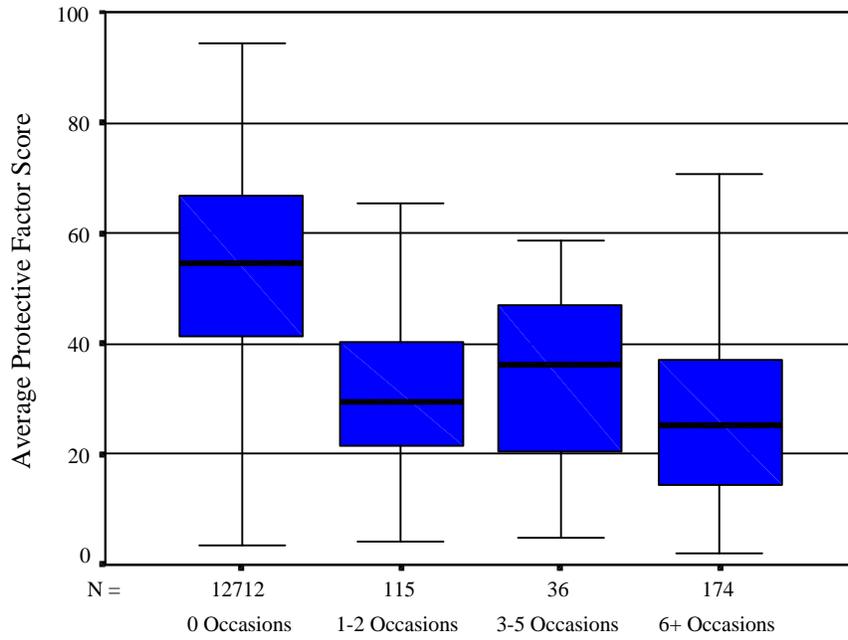


Figure F-23. Selling Drugs, Past Year.

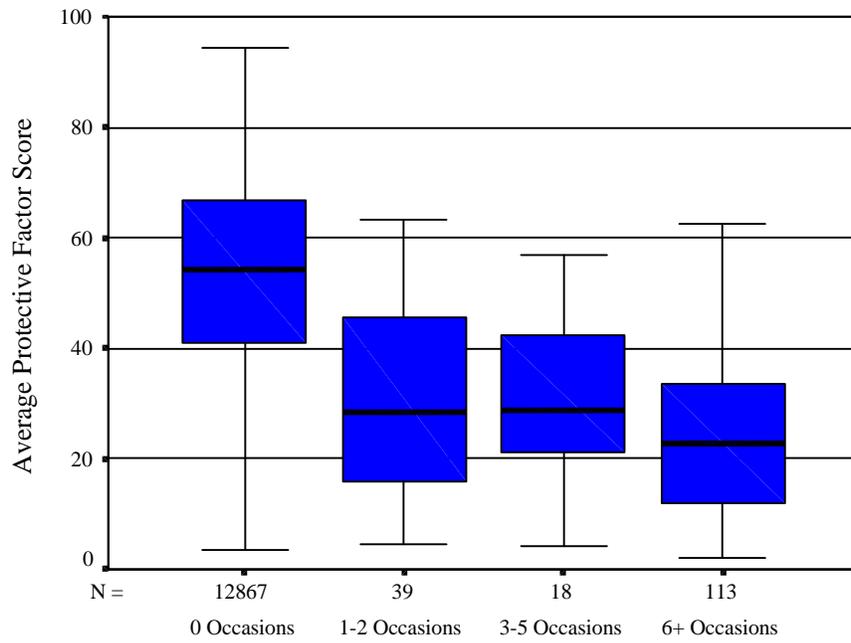


Figure F-24. Taking a Handgun to School, Past Year.

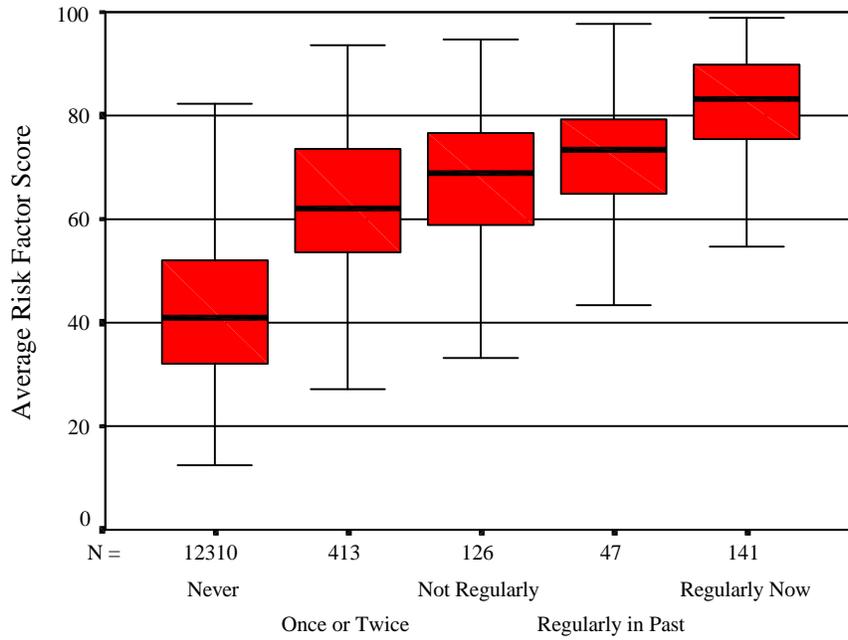


Figure F-25. Smokeless Tobacco, Use in Lifetime.

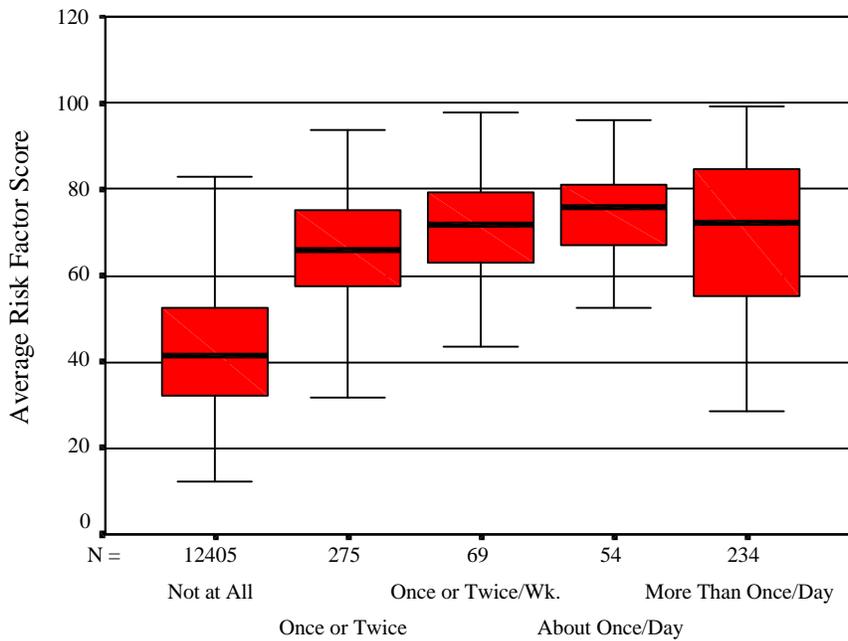


Figure F-26. Smokeless Tobacco, Use in Past Year.

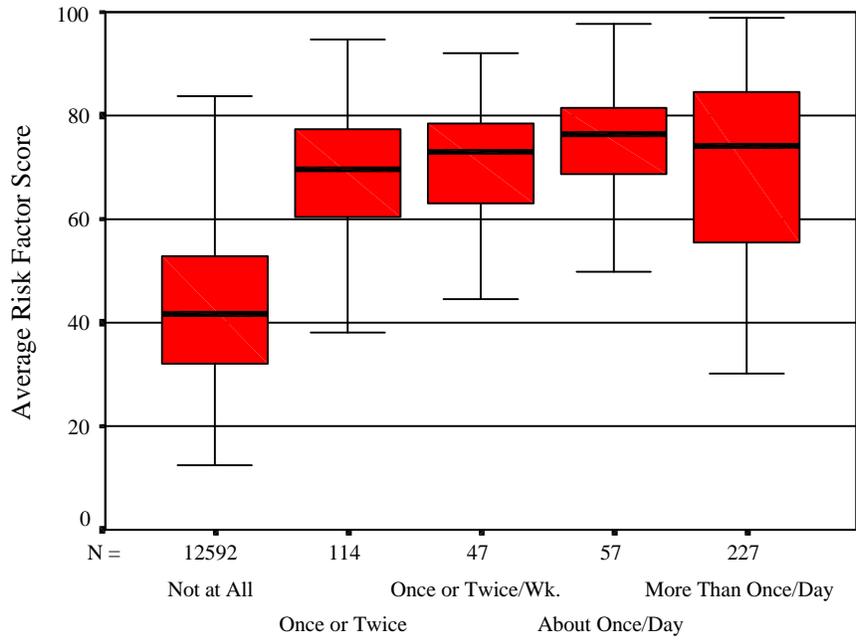


Figure F-27. Smokeless Tobacco, Use in Past 30 Days.

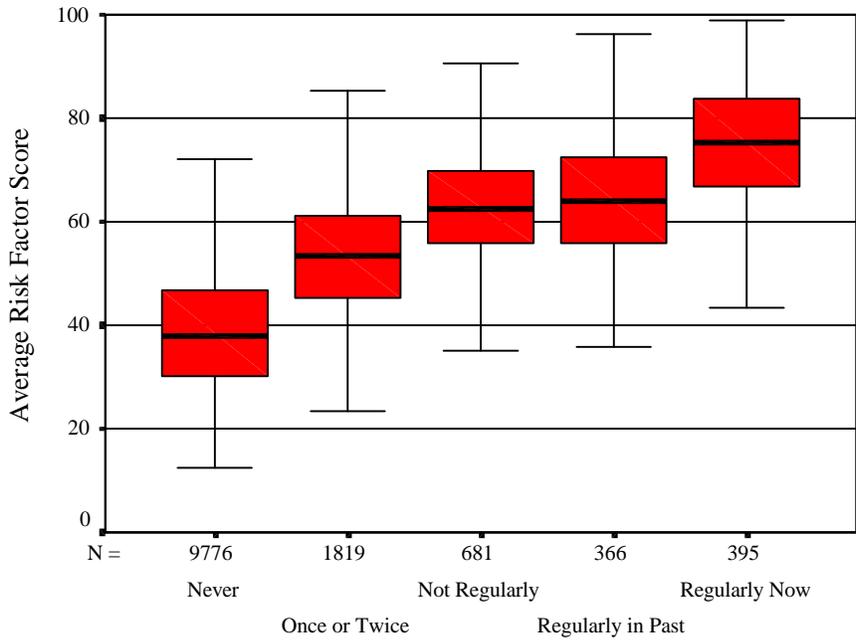


Figure F-28. Cigarettes, Use in Lifetime.

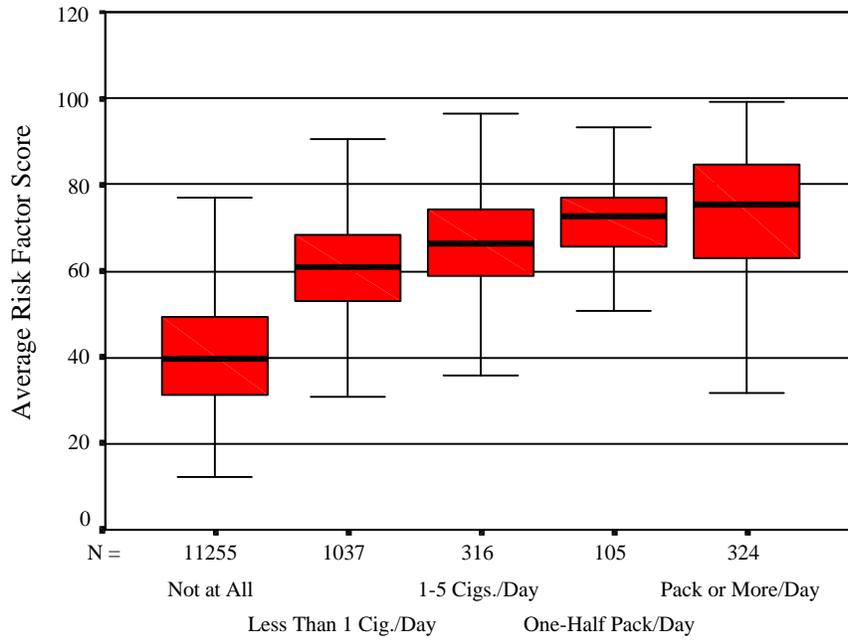


Figure F-29. Cigarettes, Use in Past Year.

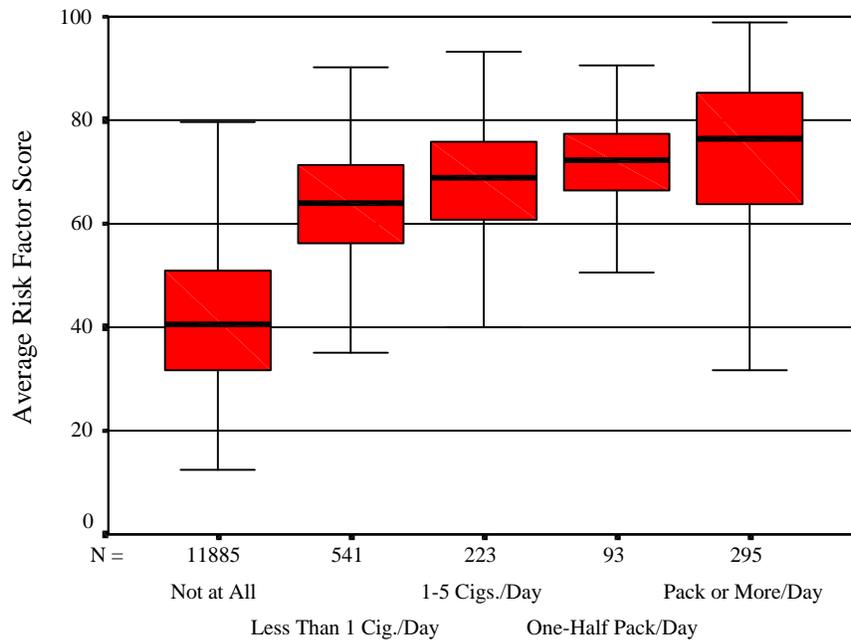


Figure F-30. Cigarettes, Use in Past 30 Days.

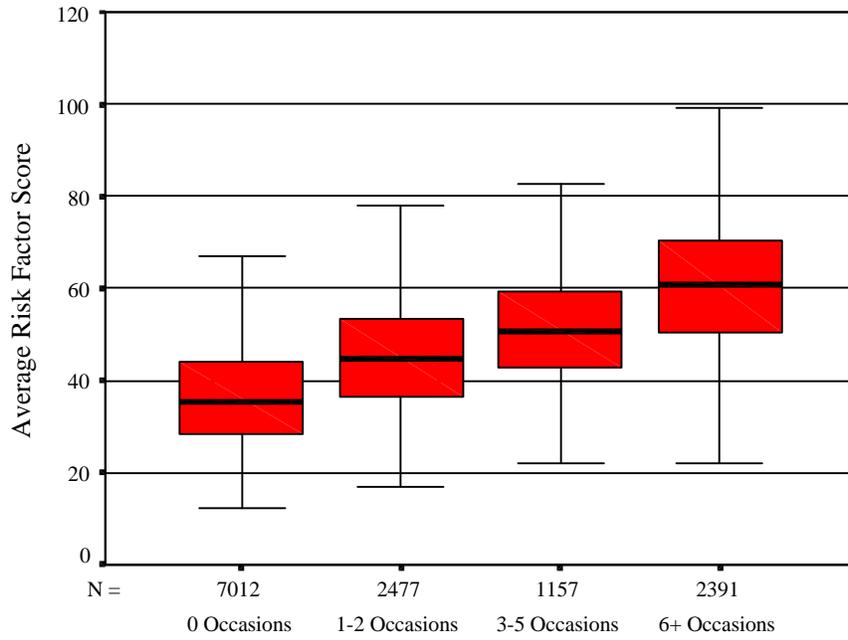


Figure F-31. Alcohol, Use in Lifetime.

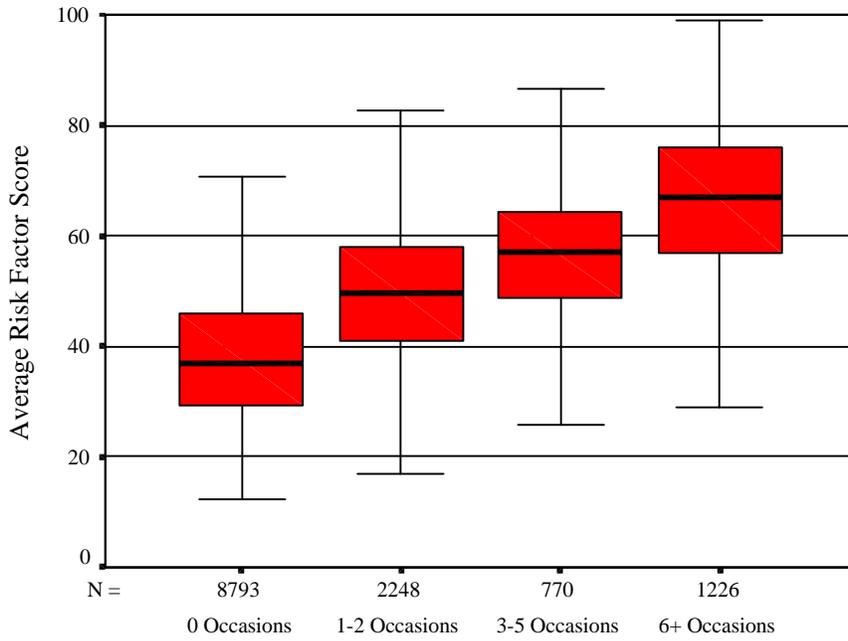


Figure F-32. Alcohol, Use in Past Year.

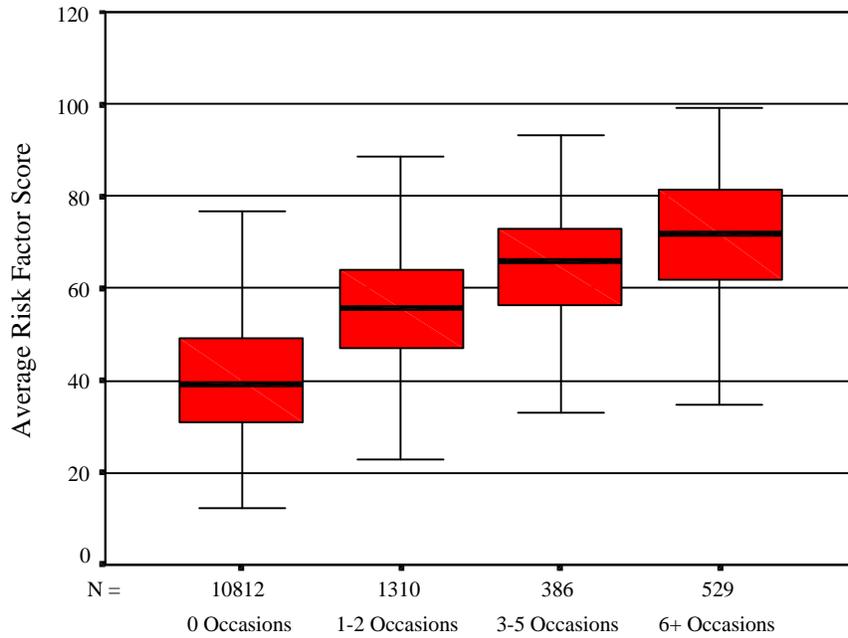


Figure F-33. Alcohol, Use in Past 30 Days.

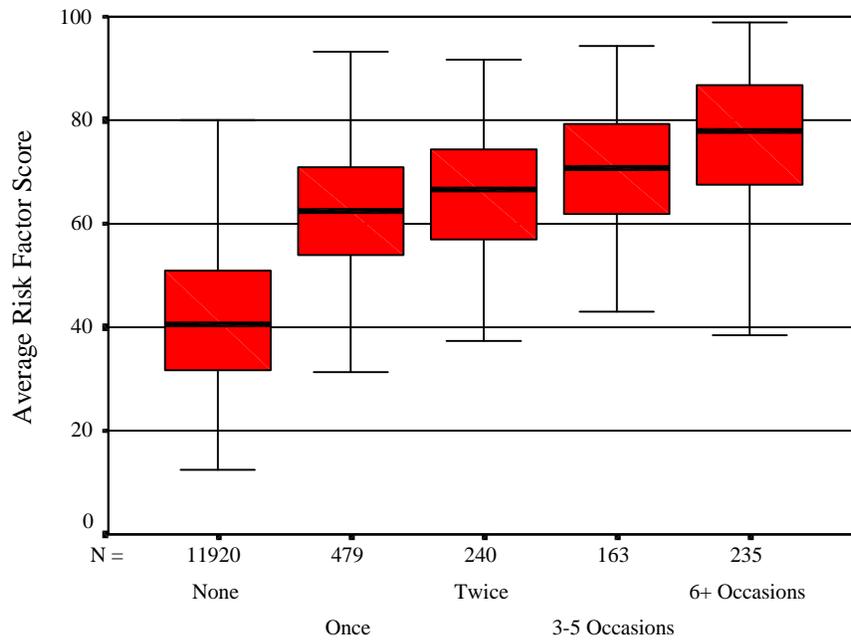


Figure F-34. Alcohol, Binge Drinking in Past Two Weeks.

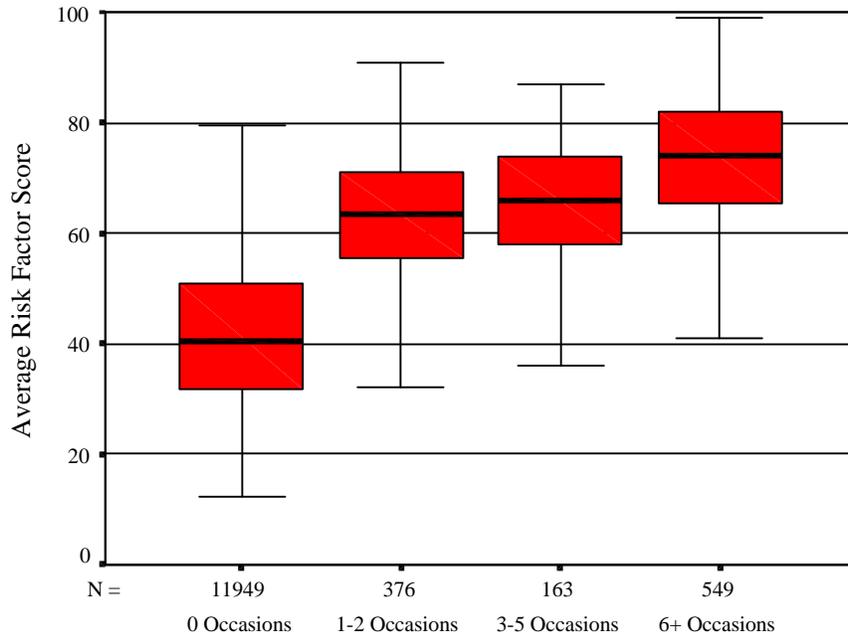


Figure F-35. Marijuana, Use in Lifetime.

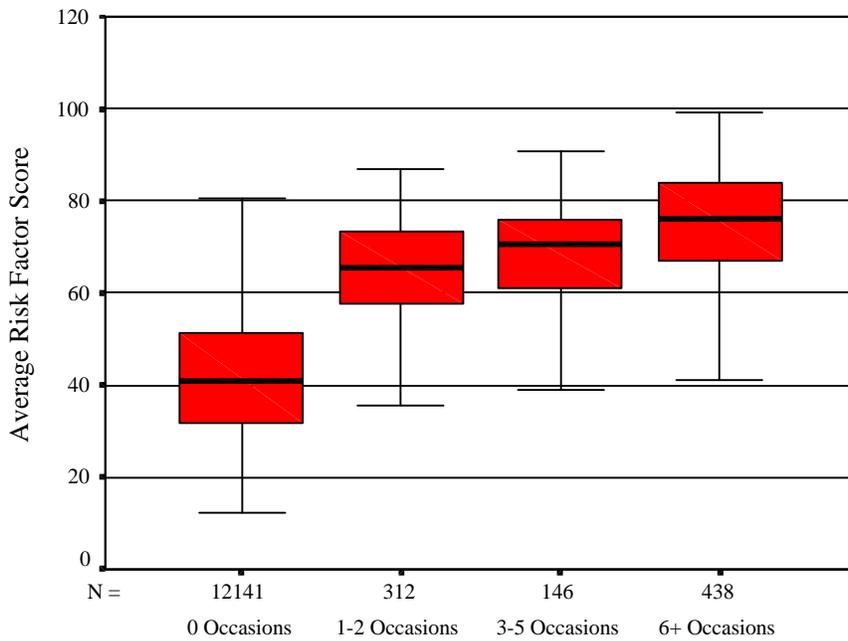


Figure F-36. Marijuana, Use in Past Year.

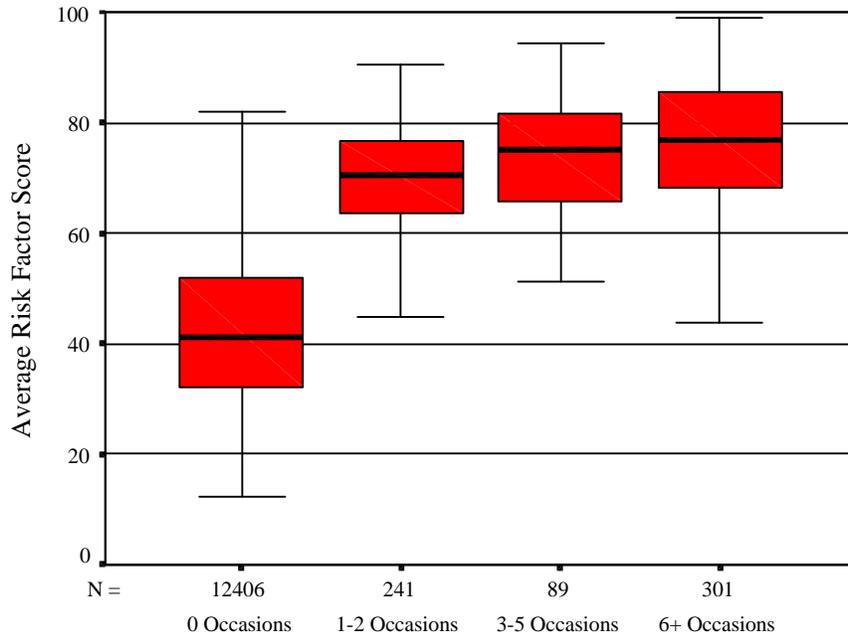


Figure F-37. Marijuana, Use in Past 30 Days.

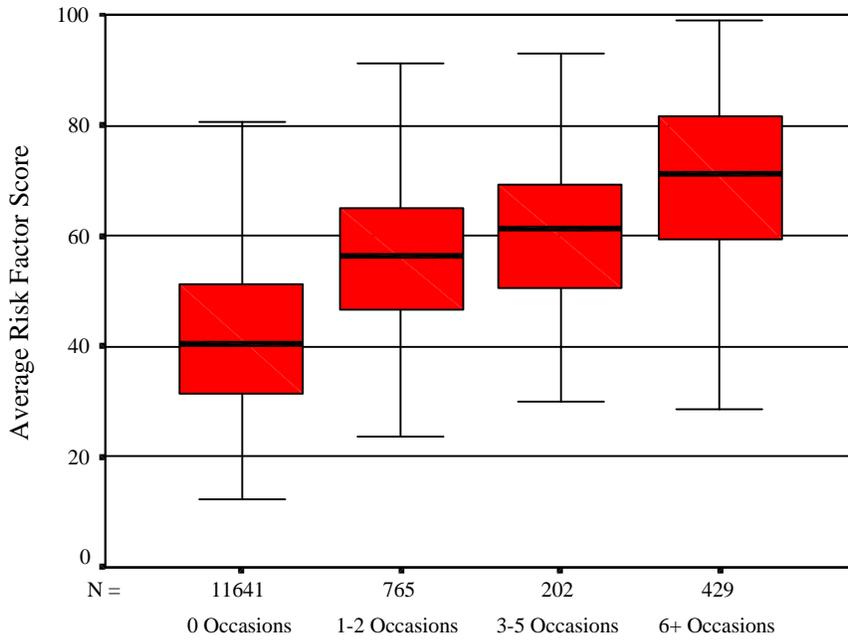


Figure F-38. Inhalants, Use in Lifetime.

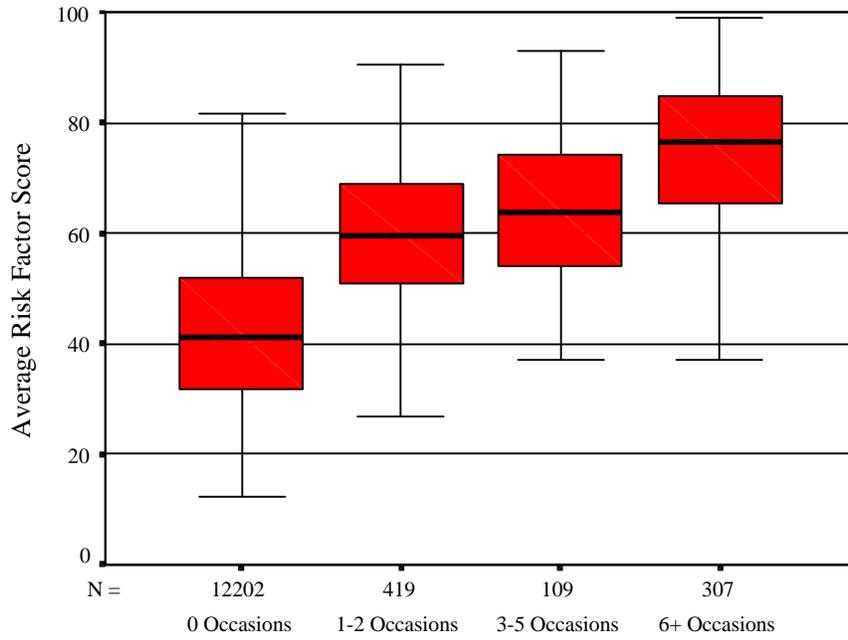


Figure F-39. Inhalants, Use in Past Year.

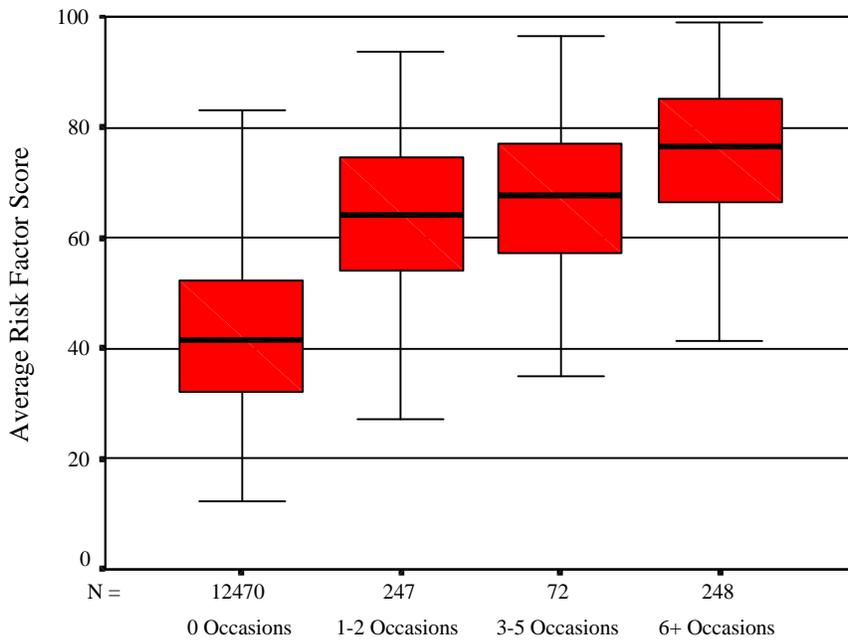


Figure F-40. Inhalants, Use in Past 30 Days.

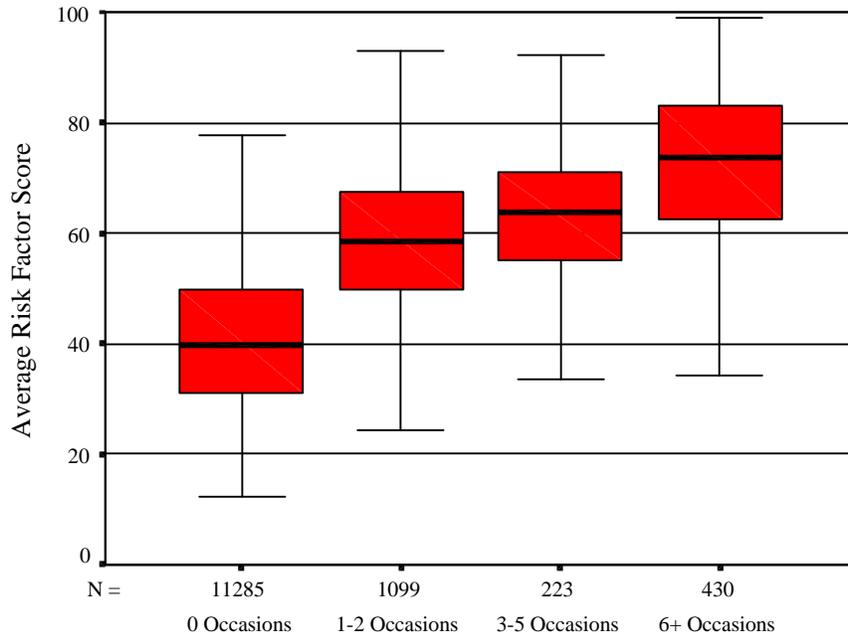


Figure F-41. Attacking Someone with Intent to Harm, Past Year.

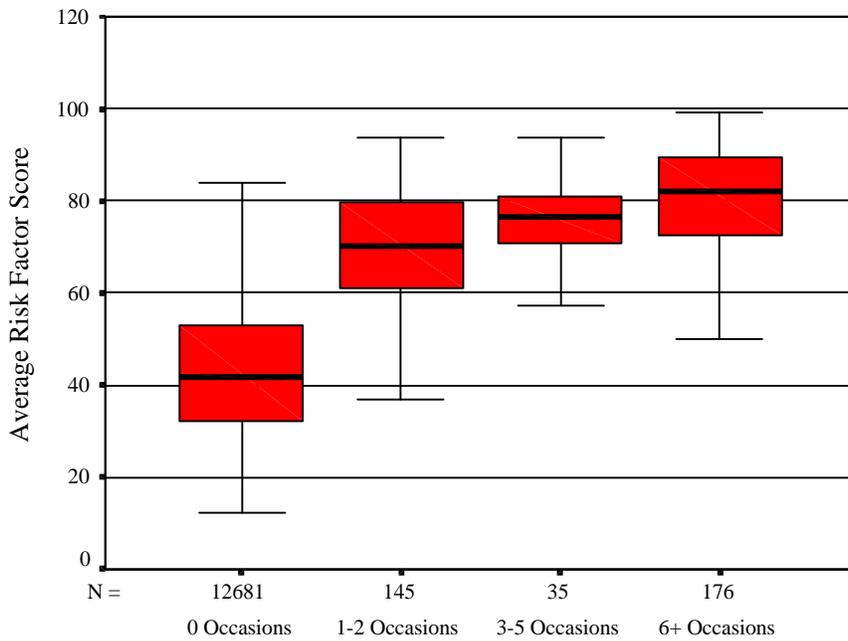


Figure F-42. Attempting to Steal a Vehicle, Past Year.

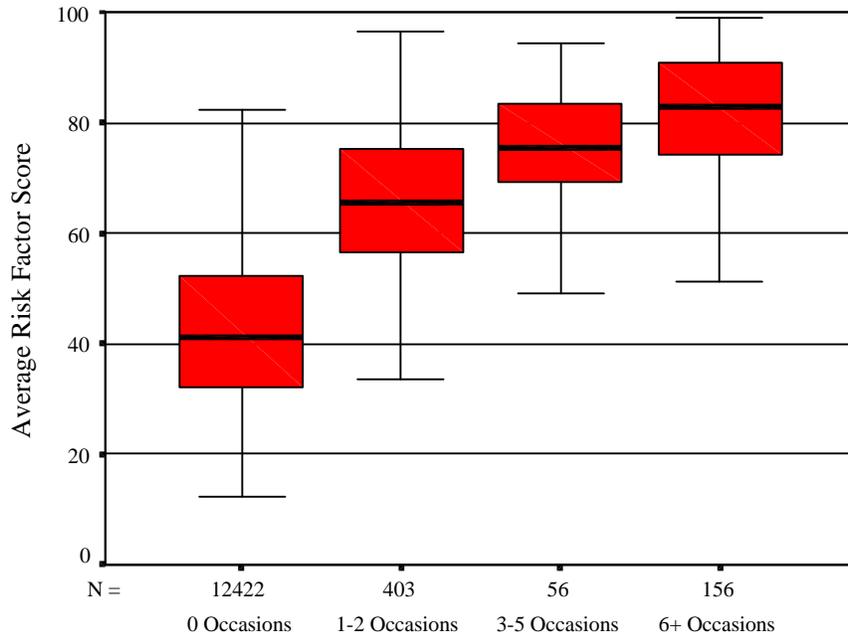


Figure F-43. Being Arrested, Past Year.

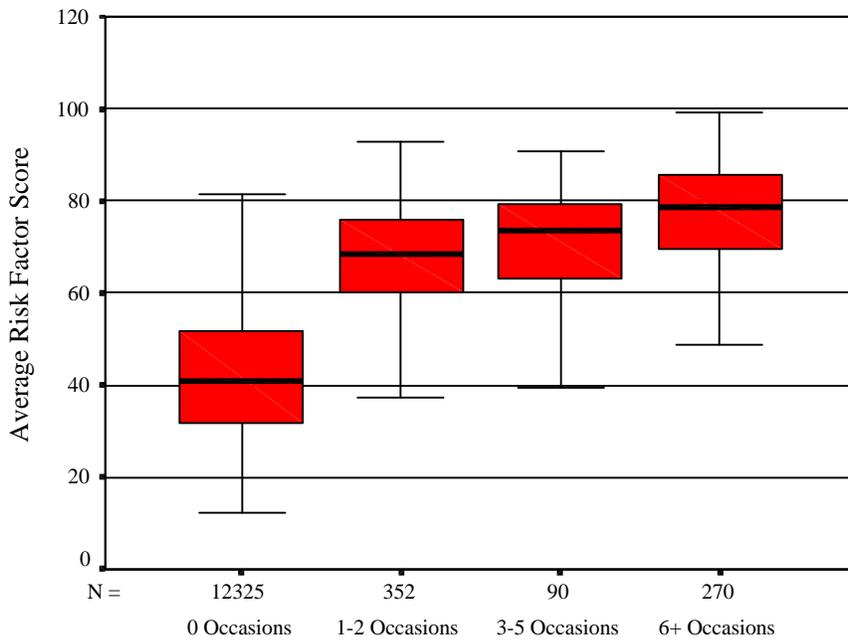


Figure F-44. Being Drunk or High at School, Past Year.

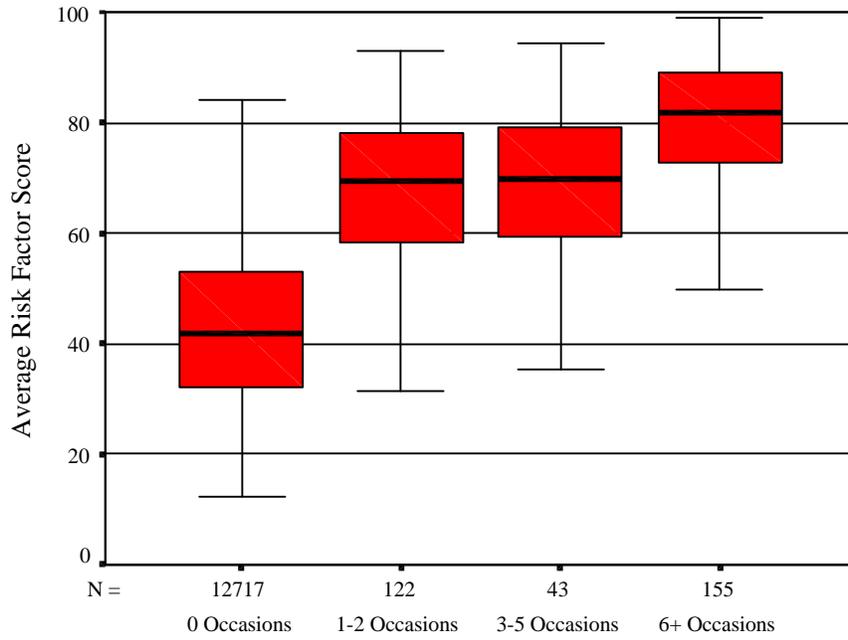


Figure F-45. Carrying a Handgun, Past Year.

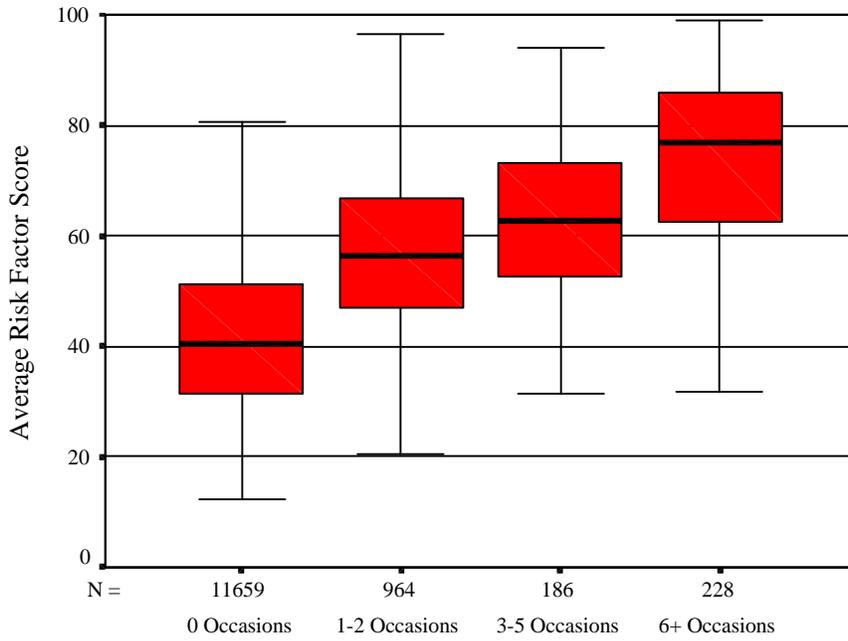


Figure F-46. Getting Suspended, Past Year.

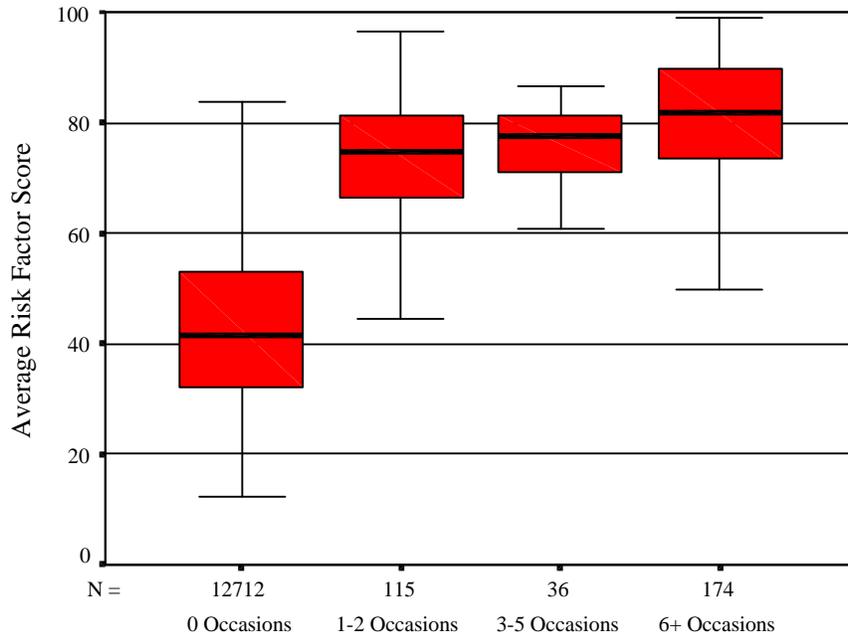


Figure F-47. Selling Drugs, Past Year.

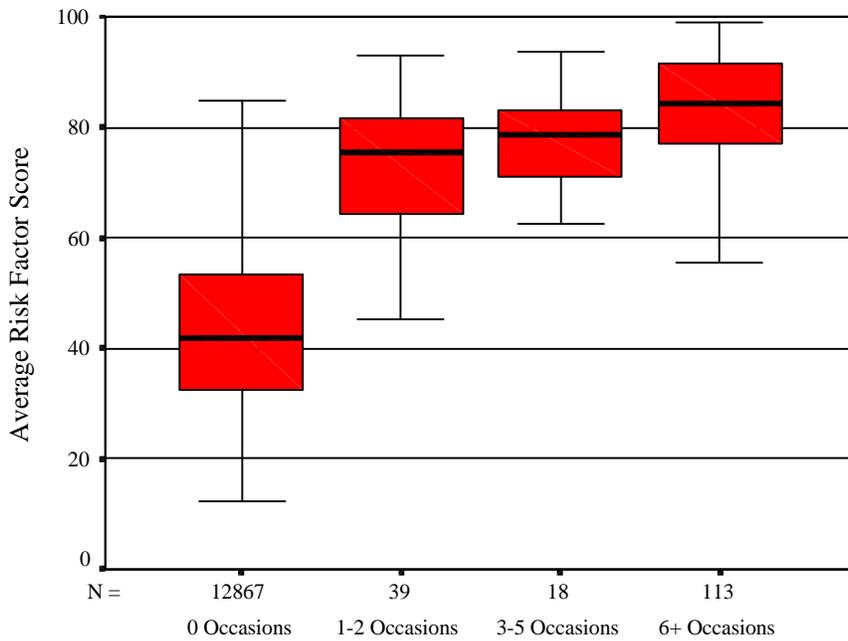


Figure F-48. Taking a Handgun to School, Past Year.

# **Appendix H.**

## **County-Level Tables**

Table H1. Percent of valid student surveys collected from each county, by demographic characteristics, 2001.

County		Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Grade</b>	7th	49.0	54.1	50.7	58.5	48.1	54.8	51.1	43.0	51.0	46.5	48.3	49.8	41.5	45.1	52.8	50.5	54.6	50.0	53.6	47.4
	8th	48.9	44.8	48.7	40.1	51.2	44.5	47.5	56.1	48.4	52.2	51.0	48.6	31.9	53.7	46.1	48.5	44.3	49.2	45.9	51.8
	Did not respond	2.1	1.1	0.6	1.5	0.7	0.6	1.4	1.0	0.6	1.2	0.7	1.6	26.6	1.2	1.0	1.0	1.1	0.8	0.5	0.8
<b>Sex</b>	Female	51.5	50.6	49.9	46.9	53.0	53.2	49.0	52.4	49.3	48.2	52.3	51.9	44.4	52.5	51.0	51.8	49.1	47.2	52.2	51.8
	Male	46.7	48.6	48.7	52.5	46.6	45.8	49.5	46.6	49.5	50.6	46.4	47.1	55.6	45.5	46.9	47.2	49.3	51.6	47.3	46.9
	Did not respond	1.8	0.9	1.4	0.6	0.4	1.0	1.5	1.0	1.2	1.2	1.3	1.0	0.0	2.0	2.1	1.0	1.7	1.2	0.5	1.4
<b>Ethnicity</b>	White	26.1	57.6	65.9	90.2	46.4	6.1	75.3	36.1	79.9	62.6	46.6	60.7	86.5	61.6	1.3	84.9	69.4	81.7	80.0	87.0
	African American	34.6	20.6	9.0	0.3	14.9	65.8	8.3	6.6	1.8	10.6	6.8	8.2	0.5	10.1	16.2	3.8	1.5	1.5	1.0	0.3
	Latino	19.4	5.1	8.1	0.3	22.5	8.1	2.9	35.8	3.0	5.3	4.6	10.1	2.4	13.8	65.7	1.3	4.6	4.2	2.2	3.0
	Asian	1.4	1.3	5.4	1.5	1.5	0.3	1.1	3.5	4.8	7.7	24.5	3.4	1.4	0.6	2.8	1.0	8.5	0.9	7.2	0.8
	Other	3.9	4.4	2.4	1.8	4.4	6.5	3.2	5.2	2.4	2.8	4.7	4.8	2.4	2.6	3.1	2.1	4.3	2.5	1.9	0.8
	Multiple	13.8	10.2	7.7	5.0	9.4	11.0	8.1	11.5	7.1	10.4	10.6	11.5	5.8	10.1	9.3	6.7	10.4	8.2	7.5	6.8
	Did not respond	0.9	0.7	1.4	0.9	0.9	2.3	1.1	1.3	0.9	0.6	2.3	1.3	1.0	1.1	1.5	0.3	1.3	1.1	0.2	1.4

Note: All county-level data are unweighted. See Table H2 for corresponding Ns.

Table H2. Number of valid student surveys collected from each county, by demographic characteristics, 2001.

County		Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
<b>Valid N</b>		567	451	1,825	337	457	310	1,607	710	661	492	975	1,421	207	1,777	388	390	1,007	1,637	414	369
<b>Grade</b>	7th	278	244	926	197	220	170	821	305	337	229	471	708	86	801	205	197	550	819	222	175
	8th	277	202	888	135	234	138	764	398	320	257	497	690	66	954	179	189	446	805	190	191
	Did not respond	12	5	11	5	3	2	22	7	4	6	7	23	55	22	4	4	11	13	2	3
<b>Sex</b>	Female	292	228	911	158	242	165	788	372	326	237	510	737	92	933	198	202	494	773	216	191
	Male	265	219	889	177	213	142	795	331	327	249	452	670	115	809	182	184	496	845	196	173
	Did not respond	10	4	25	2	2	3	24	7	8	6	13	14	0	35	8	4	17	19	2	5
<b>Ethnicity</b>	White	148	260	1,203	304	212	19	1,210	256	528	308	454	862	179	1,095	5	331	699	1,338	331	321
	African American	196	93	164	1	68	204	134	47	12	52	66	117	1	180	63	15	15	24	4	1
	Latino	110	23	148	1	103	25	47	254	20	26	45	144	5	245	255	5	46	68	9	11
	Asian	8	6	99	5	7	1	17	25	32	38	239	48	3	11	11	4	86	14	30	3
	Other	22	20	44	6	20	20	51	37	16	14	46	68	5	46	12	8	43	41	8	3
	Multiple	78	46	141	17	43	34	130	82	47	51	103	163	12	180	36	26	105	134	31	25
	Did not respond	5	3	26	3	4	7	18	9	6	3	22	19	2	20	6	1	13	18	1	5

Note: All county-level data are unweighted.

Table H3. Prevalence summaries of selected ATODs, by county, 2001.

	Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Alcohol, Lifetime	42.6	45.9	43.2	37.1	46.1	37.1	49.5	47.2	44.5	47.2	43.6	51.6	36.5	48.3	48.4	53.9	41.2	46.2	44.7	48.8
Alcohol, Annual	28.7	29.6	30.9	21.1	32.4	24.5	35.1	32.8	29.4	31.3	31.3	36.5	25.8	35.3	35.5	39.4	27.4	33.0	30.0	35.2
Alcohol, 30 Days	15.6	13.7	13.9	7.7	14.3	11.2	19.2	20.7	12.3	13.2	13.4	20.0	14.7	16.4	24.3	21.3	14.9	19.0	16.2	19.1
Alcohol, Binge Drinking	6.9	6.6	6.0	3.0	8.2	8.7	9.7	11.4	4.4	5.9	4.9	9.9	1.7	8.2	16.6	11.0	6.4	8.1	4.2	6.8
Cigarettes, Lifetime	31.0	28.0	19.4	16.4	31.4	28.8	28.9	33.3	16.1	21.6	20.2	29.6	9.0	32.1	33.9	37.0	19.9	24.2	18.7	21.6
Cigarettes, Annual	13.4	12.0	9.3	9.6	16.4	12.6	16.6	16.7	7.6	12.9	10.2	15.6	6.4	16.2	12.2	18.7	10.8	13.3	8.3	11.5
Cigarettes, 30 Days	7.1	6.6	5.4	6.8	8.2	7.5	9.7	11.5	4.5	6.5	4.8	9.3	3.2	10.5	8.2	13.5	6.9	9.5	4.2	5.8
Smokeless Tobacco, Lifetime	4.5	3.4	3.9	2.4	6.6	5.5	6.8	4.9	5.0	2.7	3.8	5.2	2.6	5.1	4.3	12.2	3.6	5.9	4.4	3.8
Smokeless Tobacco, Annual	2.6	3.8	3.3	2.7	4.6	5.3	4.7	4.7	4.0	1.7	2.2	3.8	0.5	5.0	4.1	7.3	3.0	3.8	3.4	3.0
Smokeless Tobacco, 30 Days	2.0	2.7	2.1	1.5	2.5	4.8	2.7	3.6	2.0	0.6	1.3	2.0	0.0	2.4	2.5	3.4	1.8	1.8	2.2	1.9
Bidis, Lifetime	2.3	5.1	1.7	1.9	2.6	4.0	2.7	2.4	1.6	1.5	2.2	3.7	1.1	5.2	2.6	3.0	1.2	3.0	3.2	0.8
Bidis, Annual	2.0	4.1	1.5	2.2	2.8	3.7	3.0	2.4	1.3	1.3	2.1	4.0	0.6	3.9	2.6	2.1	2.1	3.0	2.5	1.1
Bidis, 30 Days	1.2	3.5	1.3	1.5	1.9	2.3	1.9	1.2	1.3	0.9	1.5	2.7	0.6	2.7	1.9	0.5	1.1	2.2	1.2	0.8
Marijuana, Lifetime	8.7	7.5	6.1	5.5	10.2	5.5	8.4	8.9	4.8	6.8	4.1	8.8	1.7	9.6	6.0	11.1	4.2	7.9	3.9	4.4
Marijuana, Annual	5.9	5.8	4.5	4.6	8.3	3.8	6.7	6.5	3.1	6.2	3.0	7.5	1.7	7.5	4.9	7.4	3.4	6.1	2.7	3.3
Marijuana, 30 Days	3.1	2.8	2.7	4.0	5.7	2.7	3.4	4.0	2.2	3.8	1.2	5.4	1.1	4.5	2.0	5.6	1.5	4.0	1.5	1.7
Inhalants, Lifetime	10.1	15.3	5.7	5.2	11.4	5.9	10.1	9.4	8.4	8.3	12.1	9.9	5.7	6.4	9.7	9.8	8.8	10.1	11.8	7.1
Inhalants, Annual	4.9	7.3	3.4	1.9	5.7	4.5	6.2	4.4	4.8	5.3	6.7	4.8	2.3	3.7	3.6	5.1	4.5	5.5	7.6	3.6
Inhalants, 30 Days	3.7	3.9	1.9	0.9	2.4	3.4	3.4	2.1	2.0	2.3	4.0	2.6	2.3	2.1	2.7	3.5	2.7	2.9	3.9	1.9
Other Illicit Drugs, Lifetime	2.5	2.6	2.0	0.9	3.1	5.7	4.2	3.6	1.6	3.0	2.0	4.0	1.3	3.6	2.4	4.6	2.1	3.4	3.7	2.5
Other Illicit Drugs, Annual	1.7	2.1	1.4	0.6	2.2	3.9	2.9	2.3	1.1	1.5	1.1	2.6	0.6	2.6	1.4	3.0	1.3	2.5	2.0	2.0
Other Illicit Drugs, 30 Days	1.1	1.2	0.9	0.0	1.7	2.0	1.6	1.1	0.8	0.4	0.6	1.6	0.0	1.5	1.4	2.5	0.6	1.3	1.3	0.6
Any Illicit Drug, Lifetime	17.4	22.3	11.4	11.0	20.3	14.9	17.6	17.9	11.9	13.4	16.4	17.2	8.3	15.9	17.0	20.3	13.3	17.6	15.3	12.6
Any Illicit Drug, Annual	9.9	13.0	7.6	6.7	14.1	11.9	12.2	11.7	7.8	10.3	9.2	11.4	4.5	11.3	9.6	13.0	8.1	11.5	11.0	8.2
Any Illicit Drug, 30 Days	6.9	6.6	4.6	4.6	8.2	8.6	6.4	6.7	4.5	6.1	5.1	7.6	3.4	7.0	6.1	9.5	4.6	7.1	6.6	4.7

Notes: All county-level data are unweighted. See Table H4 for corresponding Ns. Only drugs with at least 3% lifetime prevalence were included in the county-level analysis.

Table H4. Valid Ns for prevalence summaries of selected ATODs, by county, 2001.

	Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
Alcohol, Lifetime	493	438	1,728	329	427	278	1,401	689	636	477	902	1,257	181	1,511	304	373	942	1,499	407	361
Alcohol, Annual	487	436	1,721	323	426	269	1,399	682	640	476	911	1,269	182	1,510	299	371	938	1,500	404	361
Alcohol, 30 Days	488	437	1,724	325	427	267	1,404	677	641	476	915	1,272	184	1,510	309	375	939	1,506	407	361
Alcohol, Binge Drinking	496	438	1,724	328	427	264	1,378	684	636	472	913	1,268	180	1,494	307	374	939	1,481	403	353
Cigarettes, Lifetime	503	440	1,756	329	442	285	1,459	690	641	481	931	1,304	189	1,572	319	381	967	1,534	411	365
Cigarettes, Annual	501	440	1,748	323	432	278	1,440	688	642	479	932	1,299	188	1,557	312	375	955	1,531	409	365
Cigarettes, 30 Days	491	440	1,730	322	425	265	1,430	669	643	478	925	1,286	187	1,546	305	378	950	1,512	408	361
Smokeless Tobacco, Lifetime	514	444	1,768	330	441	290	1,472	692	646	482	945	1,327	190	1,584	324	384	974	1,544	410	364
Smokeless Tobacco, Annual	505	443	1,747	329	434	281	1,461	687	645	482	930	1,304	189	1,571	318	383	960	1,533	407	365
Smokeless Tobacco, 30 Days	505	441	1,744	328	434	273	1,443	676	645	480	937	1,297	188	1,557	318	383	956	1,517	406	365
Bidis, Lifetime	485	431	1,719	320	422	273	1,417	671	631	470	912	1,294	181	1,541	311	369	941	1,502	403	360
Bidis, Annual	493	434	1,710	324	423	268	1,410	679	633	462	909	1,265	175	1,527	305	373	926	1,470	399	358
Bidis, 30 Days	492	434	1,716	325	422	265	1,405	674	639	466	912	1,278	179	1,522	310	376	929	1,482	403	362
Marijuana, Lifetime	497	438	1,744	328	430	273	1,389	687	645	474	916	1,286	179	1,527	316	379	943	1,510	411	364
Marijuana, Annual	489	434	1,723	326	424	264	1,373	674	642	471	906	1,274	178	1,514	305	376	937	1,492	409	361
Marijuana, 30 Days	485	432	1,711	325	421	261	1,364	667	637	471	902	1,269	174	1,496	306	373	929	1,479	406	360
Inhalants, Lifetime	496	439	1,736	327	429	270	1,374	681	643	472	912	1,268	174	1,507	309	378	934	1,497	407	364
Inhalants, Annual	485	436	1,714	322	424	264	1,365	677	643	471	906	1,262	174	1,496	304	376	930	1,485	408	359
Inhalants, 30 Days	484	434	1,714	321	423	262	1,362	674	643	472	905	1,258	174	1,491	301	376	926	1,483	406	360
Other Illicit Drugs, Lifetime	484	431	1,709	320	419	263	1,308	675	635	468	890	1,241	155	1,458	295	369	903	1,448	405	358
Other Illicit Drugs, Annual	476	425	1,680	318	412	257	1,293	664	633	463	880	1,228	154	1,441	282	364	892	1,420	398	354
Other Illicit Drugs, 30 Days	475	423	1,679	317	411	254	1,288	663	633	463	876	1,218	154	1,431	283	361	886	1,418	397	354
Any Illicit Drug, Lifetime	500	443	1,752	328	433	276	1,399	691	646	477	923	1,295	181	1,533	317	379	949	1,518	411	365
Any Illicit Drug, Annual	493	440	1,733	328	427	268	1,389	686	644	475	914	1,287	179	1,524	311	377	941	1,500	409	364
Any Illicit Drug, 30 days	493	440	1,735	328	427	269	1,388	683	644	475	913	1,288	177	1,522	310	377	940	1,501	409	364

Notes: All county-level data are unweighted. Only drugs with at least 3% lifetime prevalence were included in the county-level analysis.

Table H5. Prevalence summaries of selected delinquent behaviors, by county, 2001.

	Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Attacking Someone with Intent to Harm	18.3	15.5	10.8	7.5	15.4	21.6	14.7	17.5	8.4	8.9	13.3	16.7	8.3	16.7	16.5	15.9	7.8	11.6	11.2	8.8
Being Arrested	5.2	4.0	4.4	1.2	7.0	8.3	5.3	5.2	3.1	2.5	1.7	5.0	0.5	4.4	3.8	4.4	3.9	3.7	2.9	2.2
Being Drunk or High at School	5.5	4.3	3.6	1.8	6.0	6.2	6.0	5.4	3.2	4.1	3.6	6.3	1.0	5.7	6.0	6.6	3.4	5.3	4.1	1.6
Getting Suspended	27.5	10.1	10.2	6.3	10.5	46.4	12.6	7.3	4.7	13.7	9.2	15.3	1.5	12.5	17.2	5.5	7.2	7.5	6.1	6.3

Notes: All county-level data are unweighted. See Table H6 for corresponding Ns. Only behaviors with at least 3% prevalence were included in the county-level analysis.

Table H6. Valid Ns for prevalence summaries of selected delinquent behaviors, by county, 2001.

	Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren
Attacking Someone with Intent to Harm	546	445	1,785	332	447	291	1,556	698	651	485	967	1,387	204	1,713	364	384	997	1,618	409	364
Being Arrested	542	445	1,781	331	445	288	1,555	695	651	485	965	1,387	204	1,710	366	385	989	1,610	408	365
Being Drunk or High at School	548	444	1,788	331	449	291	1,562	699	648	487	968	1,385	203	1,716	365	381	994	1,617	413	365
Getting Suspended	549	447	1,799	333	449	295	1,575	700	655	488	971	1,396	204	1,724	366	385	996	1,622	410	366

Notes: All county-level data are unweighted. Only behaviors with at least 3% prevalence were included in the county-level analysis.

Table H7. Protective factor scale scores, by county and statewide, 2001.

	Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren	Statewide
<b>Community Domain</b>																					
Community Opportunities for Prosocial Involvement	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Community Rewards for Prosocial Involvement	46	50	53	52	43	47	48	50	49	46	45	47	53	46	49	48	55	49	52	55	49
<b>Family Domain</b>																					
Family Attachment	51	54	58	61	51	49	56	58	59	54	53	53	59	52	49	52	61	59	58	57	55
Family Opportunities for Prosocial Involvement	53	55	56	60	53	57	55	57	57	53	51	53	62	53	51	53	59	57	55	57	55
Family Rewards for Prosocial Involvement	54	55	61	62	53	55	58	60	61	58	54	56	62	53	53	55	62	60	58	60	57
<b>School Domain</b>																					
School Opportunities for Prosocial Involvement	55	59	58	58	52	46	56	54	55	56	53	56	59	54	52	55	61	55	52	60	54
School Rewards for Prosocial Involvement	50	51	47	49	44	43	48	53	43	42	43	46	55	49	48	49	59	48	49	53	48
<b>Peer-Individual Domain</b>																					
Religiosity	54	54	59	62	57	50	55	56	61	58	59	53	62	51	53	53	60	50	64	60	56
Social Skills	54	55	58	63	54	51	55	54	60	58	57	52	65	53	52	54	61	55	58	62	56
Belief in the Moral Order	51	52	56	60	50	48	52	52	57	57	54	48	64	49	49	52	60	56	52	59	53

\* This scale is currently under revision.

Notes: All county-level data are unweighted. Statewide estimates are based on weighted data.

Table H8. Risk factor scale scores, by county and statewide, 2001.

	Atlantic	Burlington	Camden	Cape May	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Ocean	Passaic	Salem	Somerset	Sussex	Union	Warren	Statewide
<b>Community Domain</b>																					
Low Neighborhood Attachment	53	47	43	40	54	58	46	48	45	44	47	51	39	53	53	47	38	47	42	40	48
Community Disorganization	64	57	51	41	54	78	53	67	43	46	51	60	34	58	71	55	39	53	47	44	56
Personal Transitions and Mobility	49	48	42	35	47	61	41	50	39	45	40	45	46	47	59	38	44	38	36	34	46
Community Transitions and Mobility	49	54	49	41	44	56	45	56	51	47	51	50	52	51	49	43	49	50	54	49	51
Laws and Norms Favorable to Drug Use and Firearms	43	39	35	38	42	42	39	36	36	39	37	41	30	42	42	43	29	41	31	35	38
Perceived Availability of Drugs and Firearms	30	29	27	23	29	27	29	30	27	29	25	30	22	31	29	31	23	30	25	27	28
<b>Family Domain</b>																					
Poor Family Supervision	45	47	45	43	47	46	46	44	42	47	48	49	45	49	47	47	43	44	48	44	46
Poor Family Discipline	41	40	38	34	42	49	40	41	36	38	40	42	34	43	49	40	35	37	39	35	41
Family Conflict	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Family History of Antisocial Behavior	44	35	32	26	39	46	37	39	29	33	30	38	22	38	43	42	26	32	26	31	35
Parental Attitudes Favorable toward ATOD Use	40	40	40	39	41	41	43	41	41	41	40	43	38	43	39	45	39	40	39	41	40
Parental Attitudes Favorable toward Antisocial Behavior	50	49	49	46	48	50	50	51	50	50	50	53	47	52	48	54	46	50	48	48	50
<b>School Domain</b>																					
Poor Academic Performance	55	52	46	48	56	59	52	53	44	47	47	51	44	55	61	53	44	50	44	46	51
Low School Commitment	43	51	46	50	53	43	52	43	57	48	52	54	45	53	42	53	46	54	55	47	49
<b>Peer-Individual Domain</b>																					
Rebelliousness	50	51	45	42	51	52	50	48	48	46	48	51	42	51	49	47	44	47	47	46	48
Friends' Delinquent Behavior	59	47	45	42	53	68	49	48	40	48	47	53	36	51	55	46	41	44	42	41	50
Friends' Use of Drugs	38	36	34	29	38	35	38	38	32	34	32	39	24	38	36	41	31	35	31	35	35
Peer Rewards for Antisocial Behavior	42	42	40	34	44	40	41	44	41	42	39	44	32	42	36	48	40	43	41	39	40
Favorable Attitudes toward Antisocial Behavior	51	54	53	52	53	53	55	54	53	54	54	58	49	58	54	57	51	55	55	54	54
Favorable Attitudes toward ATOD Use	36	36	37	32	38	39	39	39	35	38	35	40	29	40	37	41	33	37	35	35	37
Low Perceived Risks of Drug Use	39	31	30	28	36	43	32	34	27	31	29	33	23	35	37	33	27	30	28	28	33
Early Initiation of Antisocial Behavior	47	41	36	32	42	52	42	41	33	37	36	42	26	42	46	43	34	37	34	35	40
Impulsiveness	49	54	47	46	50	55	50	51	50	49	51	52	46	53	49	49	46	48	52	48	50
Sensation Seeking	44	48	43	48	45	41	47	43	47	47	45	46	44	48	40	47	44	48	46	46	45

\* This scale is currently under revision.

Notes: All county-level data are unweighted. Statewide estimates are based on weighted data.

## Appendix I. Technical Notes

The *2001 New Jersey Middle School Survey (2001 NJMSS)* was a self-administered, school-based survey of New Jersey public- and private-school students attending grades 7 and 8. Data were collected between December 1, 2000, and March 30, 2001. Students had 50 minutes in which to complete surveys. Schools in each of New Jersey's 21 counties were recruited to participate.

The *2001 NJMSS* used a cluster sample design to select schools within each of New Jersey's 21 counties. All schools were selected with a probability of selection proportionate to their size within each county.

Because New Jersey's counties vary widely in population, the number of students enrolled in middle schools varied from a low of 1,527 in Salem County to a high of 19,166 in Bergen County. In the smallest counties, most schools were selected to complete the survey. In the largest counties, smaller samples of schools were selected to participate. The goal of the *2001 NJMSS* was to survey a sufficient number of students in each county to enable stable county-level estimates, for 7<sup>th</sup> and 8<sup>th</sup> grade students, to be calculated from the data. Consequently, sample size estimation was based on an acceptable level of confidence ( $\pm 4.0$  was selected) after both school non-response and student non-response were taken into account.

In each county, schools were selected until the total enrollment of selected schools met, or exceeded, the desired sample. All schools that were selected were identified as the *primary sample* in that county. These schools were the primary targets of recruitment. Concurrently with the selection of the *primary sample*, an additional number of schools was selected as a *secondary sample*; the same methodology was used. These additional schools were selected to assure an adequate sample size within each county, while maintaining a level of randomness that helps ensure a statistically valid sample. If a school that was identified as *primary* declined to participate, a school from the *secondary sample* was contacted, and recruited, for participation. Because of the low initial participation rates from schools, the *primary* and *secondary* samples were eventually collapsed into a single pool.

Note that data were weighted in all analyses to provide estimates generalizable to all public- and private-school students in the 7<sup>th</sup> and 8<sup>th</sup> grades in the state. The statewide analysis used data that were weighted by county enrollment to reflect the population distribution of the participating counties in the state. Weights were determined using the Fall 2000 enrollment as a baseline. For each county, the county weight was derived by calculating the county enrollment as a proportion of the total state enrollment, which was then divided by the county surveyed N as a proportion of the total surveyed N.

$$\text{County Weight} = \frac{\text{County Enrollment}}{\text{State Enrollment}} \div \frac{\text{County Surveyed } N}{\text{State Surveyed } N}$$

Table I-1. The number of schools selected for the *primary sample* and *secondary sample*, school enrollment, participating schools, and valid surveys, by county.

<b>County</b>	<b>Total Schools<sup>1</sup></b>	<b>Total Enrollment<sup>2</sup> (7<sup>th</sup>-8<sup>th</sup> Grade)</b>	<b>Schools in Primary and Secondary Sample</b>	<b>Participating Schools</b>	<b>Valid Surveys<sup>3</sup></b>
Atlantic	35	6,448	10	4	567
Bergen	107	19,166	18	0	0
Burlington	47	10,819	14	3	451
Camden	69	13,993	15	6	1,825
Cape May	15	2,453	7	1	337
Cumberland	20	3,300	12	2	457
Essex	107	18,823	14	2	310
Gloucester	25	6,846	13	4	1,607
Hudson	94	11,705	15	5	710
Hunterdon	18	2,994	6	1	661
Mercer	36	8,488	13	1	492
Middlesex	61	16,012	15	4	975
Monmouth	66	15,655	13	4	1,421
Morris	48	10,418	16	1	207
Ocean	28	11,288	10	3	1,777
Passaic	59	11,198	16	2	388
Salem	10	1,527	9	3	390
Somerset	24	6,494	10	3	1,007
Sussex	18	3,630	10	5	1,637
Union	54	11,029	15	2	414
Warren	16	2,457	10	3	369
<b>Total</b>	<b>957</b>	<b>194,743</b>	<b>261</b>	<b>59</b>	<b>16,002</b>

Notes: (1) Total number of public- and private-schools with a 7<sup>th</sup> and 8<sup>th</sup> grade combined enrollment total greater than 39; (2) All enrollment data based on 1999-2000 New Jersey Department of Education counts; (3) Participating students after invalid surveys and student refusals are removed.