The 1999 New Jersey Middle School Survey

A Statewide Report

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Research & Information Systems
Division of Addiction Services

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Executive Summary

The New Jersey Communities That Care Survey was conducted between May and June of 1999 on 9,387 7th and 8th grade public and private school students throughout the state. There were two main objectives for the survey. The first was to estimate the prevalence of the use of alcohol, tobacco and other drugs (ATOD) among middle school students. The survey collected data on a comprehensive set of substances, including alcohol, tobacco, marijuana, inhalants, hallucinogens, cocaine and heroin. The second and equally important objective of the survey was to identify risk and protective factors that correlate with ATOD use in order to inform prevention planning.

Seventeen of New Jersey's 21 counties participated in the survey, and 95.9% of participating students were drawn from public schools. Over a hundred schools (101 schools) were targeted for survey participation, 54 (53.5%) agreed to participate and 41 (79.6%) returned the survey. This report was compiled using data from 14 of the 17 counties and 36 of the 41 schools that returned the survey. It was necessary to eliminate from the sample 3 counties (Mercer, Atlantic and Bergen) whose response rates were deemed insufficient to adequately represent the student population in these counties. The final sample of 8,967 students selected for analysis represented 72.7% of the total 7th and 8th grade students in the state.

Demographics

Students in the survey were 51% male and had an average age of 13.3 years. Over two thirds (68%) identified themselves as European American (white), with 13% reporting African American heritage and 11%, Hispanic heritage.

Almost half (47%) of middle school students in New Jersey came from single parent families compared to 18% in the six-state Communities That Care (CTC) comparison group.

Alcohol Use

Alcohol was the most widely used substance by middle school students, with 53% (48% in grade 7 and 58% in grade 8) reporting use at some time in their lifetimes. Lifetime alcohol use was about 4% lower than that reported by students in 1995. Past 30-day use stood at 25% (5% lower than 1995) and 10% of students had engaged in binge drinking. By comparison, 57% of middle school students in the (CTC) comparison group reported using alcohol in their lifetimes, with 27% reporting use in the past 30 days and 15% reporting binge drinking.

Tobacco Use

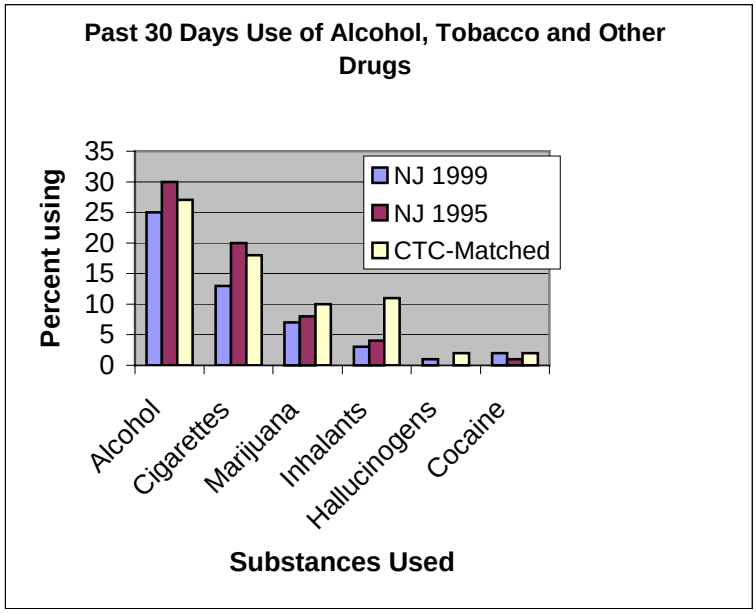
Lifetime cigarette smoking by middle school students stood at 38% in 1999, compared to 40% in 1995. In the 30 days prior to the survey date, 13% of students smoked cigarettes, showing a substantial decline from the 20% in 1995.

Seven percent of students reported using smokeless tobacco, with 3% reporting use in the past 30 days. By comparison, 9% of students in the six-state CTC matched survey reported using smokeless tobacco in the past 30 days. No data were available for 1995 in New Jersey.

Marijuana Use

Twelve percent of the surveyed students had used marijuana in their lifetime, and lifetime use had not changed much from its 1995 level of 14%. Past 12 months use of marijuana stood at 10%, which is 3% lower than the 1995 level. Seven percent of the students used marijuana in the past 30 days, showing little change from the 1995 level of 8%. Marijuana use jumped significantly from 4% in grade 7 to 10% in grade 8. Similar jumps by grade were observed both in 1995 (from 5% in grade 7 to 12% in grade 8) and in the CTC matched data (from 7% in grade 7 to 13% in grade 8).

Inhalants Use



Inhalant use by New Jersey middle school students continued to be lower compared to other state middle school students. In 1995, 10% of middle school students used inhalants in their lifetime with 8% using it in the past 12 months. In the current survey, 8% of middle school students reported using inhalants in their lifetime with 7% reporting use in the 12 months prior to the survey period. Past 30-day use stood at 3% in 1999 and at 4% in 1995, with little variation between grades. By comparison, for the CTC Matched Comparison students, the average lifetime inhalant use was 21% with 11% reporting use in the past 30 days. Contrary to other drug use, inhalant use does not seem to increase with grade level in New Jersey.

Hallucinogens

Two percent of New Jersey middle school students reported using hallucinogens in their lifetime. Two percent of students used hallucinogens in the past 12 months, with use jumping from 1% in grade 7 to 3% in grade 8. Past 30-day use for grades 7 and 8 combined stood at 1%, with no difference between grades. By comparison, 4% of the six-state middle school students reported using hallucinogens in their lifetime, with use jumping from 3% in grade 7 to 6% in

grade 8. Two percent of the CTC middle school students reported using hallucinogens in the past 30 days. There was no comparable data for 1995.

Cocaine

Two percent of middle school students reported using cocaine in their lifetime, with use jumping from 1% in grade 7 to 3% in grade 8. Only 1% of students reported using cocaine in the past 30 days and in the past 12 months. In 1995, 3% of middle school students reported using cocaine in their lifetime, with 2% reporting use in the past 12 months (2% in grade 7 and 3% in grade 8). Cocaine use among New Jersey middle school students appeared to be lower compared to use by students in the CTC Matched Comparison (2% in the past 30 days).

Heroin

Although small in proportion, middle school students reported that they experimented with hard drugs, such as heroin. The 1999 survey asked students about their lifetime heroin use and found 1% had experimented with the drug. No comparable data were available from the 1995 survey and the CTC comparison data.

Other Drugs

Recognizing that the survey instrument could not list all drugs individually, for the first time in the 1999 survey, a general question was asked about students' use of drugs that were not mentioned separately in the questionnaire. Interestingly, 9% of students admitted to using other unspecified drugs in their lifetime. Some 6% reported using other drugs in the past 12 months and 4% used them in the past 30 days.

Delinquent Behavior

It appears that delinquent behavior among New Jersey middle school students is comparable to the CTC matched comparison students. Eight percent of New Jersey middle school students reported that they had been drunk or high at school at least once in the 12 months prior to the survey date. Three percent reported selling illegal drugs, 3% had carried a handgun in their home neighborhood and 1% had taken a handgun to school. By comparison, 10% of the CTC middle school students had been drunk or high at school, 5% sold illegal drugs, 7% carried a handgun and 3% had taken a handgun to school.

Risk and Protective Factors

New Jersey middle school students perceive that drugs are risky and they report low family history of antisocial behavior. These and other risk and protective factors suggest that New Jersey Middle school students have several strengths that can be exploited towards minimizing ATOD use.

Peer Leadership Schools

Students from Peer Leadership Schools (PLS) had similar levels of ATOD use and showed a similar prevalence of delinquent behavior as non-PLS students. While PLS students also showed similar protective factor profiles as the rest of students in the surveys, PLS students tended to show higher levels of "Low Neighborhood Attachment" and "Community Disorganization" than non-PLS students.

Policy Implications

Identifying risk and protective factors along with levels of ATOD use will improve the quality of information needed for prevention planning. In addition, such data will serve as indirect tools for the evaluation of prevention policy measures, such as the cigarette tax increase and the impact of the Tobacco Age-of-Sale Enforcement program. Continuous monitoring of the prevalence of ATOD use as well as the measurement of risk and protective factors among middle school students is, therefore, an important component of our public health initiative.

Introduction

This report describes the conduct and findings of a survey of 7th and 8th grade students in the State of New Jersey. The survey was sponsored by the Division of Addiction Services, of the New Jersey State Department of Health and Senior Services, which contracted with Developmental Research and Programs, Inc. (DRP), of Seattle, Washington, to conduct the survey. The survey data were collected in May and June of 1999. The sample included both public and private schools. Many of the technical aspects of this survey effort that are necessary for interpreting the data are presented herein. However, a few additional aspects of this survey effort are included as an appendix—see Appendix A: Technical Report.

The New Jersey Communities That Care® Youth Survey

Students were surveyed using the *New Jersey Communities That Care® Youth Survey* instrument, which is an adaptation of the *Communities That Care®* (CTC survey) developed by DRP. The CTC survey was developed to provide scientifically sound information to communities on the prevalence of risk and protective factors among youth, which is essential to support needs assessment, prevention planning, and intervention planning at the local level. Risk and protective factors are characteristics of the school, community, family environments, and individual characteristics of the students' themselves, that are known to predict drug use, delinquency, and gang involvement among youth (Hawkins, Catalano and Miller, 1992). Besides measuring risk and protective factors, the CTC survey instrument also assesses the current prevalence of these problem behaviors in the community.

There are a total of 18 risk factors and 10 protective factors measured in the CTC survey instrument. Some of the risk factors are broad enough that they require two separate survey scales for adequate measurement. As a result, 25 separate risk factor scales are used to measure the 18 risk factors. Each risk and protective factor scale is calculated from a group of items. Some scales (e.g. religiosity) are calculated using a single item, others (e.g. early initiation of problem behavior) are calculated using multiple items. Appendix B provides a description of the risk and

protective factors in the survey and their relationship to various prevention programs.

The current form of the survey was developed based on normative data collected from over 72,000 students participating in statewide surveys in Kansas, Maine, Oregon, South Carolina, and Washington of 6th through 12th grade students. The surveys were conducted from 1994 through 1997. An average of about four survey items is used to measure each risk and protective factor scale. Reliability for the constructs is good (the average value for Cronbach's alpha was = .79). The survey, its uses, and its ongoing development have been described in three recent articles (Pollard, Hawkins, Catalano, & Arthur, 1998; Pollard & Lofquist, 1998, Pollard, Hawkins & Arthur, 1999).

The Participating Students in New Jersey

Survey plans called for participation of all 7th and 8th grade New Jersey middle school students. Seventeen of 21 county school districts participated in the survey. However, in 3 counties participation did not achieve required levels for inclusion in the statewide sample (Atlantic, Bergen and Mercer). Consequently, statewide estimates are based on weighted samples from 14 counties (See *Appendix A: Technical Report* for more information).

Based on 1998 enrollment figures provided in the New Jersey Department of Education's school directory, there are a total of 135,055 7th and 8th grade students enrolled in the participating districts that were selected into the statewide sample.

A total of 9,387 surveys were returned to DRP for scoring and analysis. Of these surveys, 9,005 (95.9%) were from public schools and 382 (4.1%) were from private schools.

Comparison data and survey norms for assessing the meaning of the New Jersey Middle School survey results come from two sources: The CTC/Six-State Study and the 1995 New Jersey Middle School Survey on Substance Use.

Survey Norms and Comparative Data

Comparison data and survey norms for assessing the meaning of the New Jersey middle school student survey results come from two sources. First, survey norms (the CTC Normed Database) are based on data from the Six-State study. The Six-State study was funded by the Center for Substance Abuse Prevention, Department of Health and Human Services, during the years 1993-1997. This project supported the development of

a student survey instrument measuring risk and protective factors predictive of ATOD (alcohol, tobacco, and other drugs) use, delinquency, gang involvement, and other problem behaviors in adolescence. School survey data were collected in five states: Kansas, Maine, Oregon, South Carolina, and Washington. (One other state, Utah, participated in the CTC project, but school survey data were not collected in Utah.) These states conducted statewide school surveys measuring ATOD use, delinquency, and risk and protective factor prevalence. Normative data on risk and protective factor prevalence are drawn from the Six-State study.

The second comparison was *The New Jersey Middle School Survey on Substance Use*. This survey was administered between May and June of 1995 on 2,849 7th and 8th grade students throughout the State. The survey was supported by Contract Number 277-94-1036 and funded by the Division of State Prevention Systems, Center for Substance Abuse Prevention (CSAP). The final survey report was prepared by Audits and Surveys Worldwide and the staff of Research and Information Services, Division of Addiction Services of the New Jersey State Department of Health and Senior Services.

Results from this 1995 survey report are included in this analysis as a 'baseline' from which to assess previous prevention and intervention efforts that were implemented during the past three years. It is important to note that these two surveys, the 1999 New Jersey CTC Survey and the New Jersey 1995 Survey, were not specifically designed for longitudinal evaluation. Therefore, any analysis involving longitudinal trends in the data should be done with care.

The Validity of the Survey Data

Three separate strategies were used to assess the validity and honesty of the student self-report survey data. The first two strategies eliminate students who appear to exaggerate their substance use. In the first strategy, students who reported the highest possible levels of use for every illicit drug (excluding marijuana) were eliminated from the survey data set. In the second strategy, students are asked whether they ever used a fictitious drug, "Derbisol," in their lifetime and in the past 30 days, as well as how old the student was when they first (if ever) used Derbisol. If the student reported the use of Derbisol on two

of these three questions, their survey was not included in the analysis of the findings.

The third strategy identified students who repeatedly reported logically inconsistent patterns of substance use. If, for example, a student reported 10 uses of alcohol in the past 30 days, but no use in their lifetime, that logical inconsistency was noted. Students were identified as inconsistent responders only if: 1) they were inconsistent on two out of four of the following substances: alcohol, cigarettes, chewing tobacco and marijuana; or 2) if they were inconsistent on five or more of the nine remaining illicit substances. This approach will not eliminate students who make occasional clerical mistakes.

Good cooperation was obtained from New Jersey students. Of the 9,387 surveys that were received, a total of 8,979 students (95.5%) completed valid survey forms. This level of cooperation is typical of most school surveys. A total of 408 (4.3%**)** were identified by one or more of the three strategies described above as providing invalid survey results and were excluded from further analysis. Of the students eliminated, 131 exaggerated illicit drug use (strategy 1), 333 reported the use of Derbisol (strategy 2) and 203 were identified because of logical inconsistencies in their answers (strategy 3). Totaling these three strategies sums to more than 408 students because many students were identified by more than one strategy.

Confidence Intervals for Interpreting Survey Results

The precision of survey findings depends in part, on the size of the survey sample relative to the size of the population being sampled from. As the size of the sample increases, the confidence that survey findings accurately represent the larger student population also increases. Confidence in survey findings is expressed as a confidence interval. A confidence interval is an estimated range of values within which there is a 95% probability that the true population is located. For example, 48% of 7^{th} grade students in New Jersey reported the use of alcohol sometime in their lifetime. The confidence interval for this is $\pm$1.26%, meaning that the percentage of students who have used alcohol in their lifetime is likely to be between 46.7% and 49.3%. The calculation of confidence intervals assumes that a valid, representative sample of the student population has been obtained.

As the proportion of students endorsing a particular item approach the extreme values of either 0% or 100%, the confidence interval decreases. As another example, 1% of 7th grade students reported the 'current use' of cocaine. The confidence interval for prevalence of past 30 day use of cocaine is smaller, approximately ±.4%. This means that the actual prevalence of past 30-day use of cocaine is likely to fall between 0.6% to 1.4%.

Confidence intervals are larger for individual grade levels because the number of students at a specific grade level is smaller than the total number of students.

The Demographics of the Students

The number of students providing demographic data is presented in Table 1. Results are reported individually for each gender and grade level combination. Results for specific grade levels include information only from those students providing complete demographic data. Results in the combined row include information from all students reporting at least one piece of demographic information.

Results presented on Table 1 show the average age and gender make-up of the students. Table 1 shows that the average age of students was 13.3. Fifty-one percent of the students were male. Table 2 shows the percentage of students who identified themselves as members of different ethnic groups. A majority of students identified themselves as European American (68%).

Family characteristics of the students are reported in Table 3. (48%) came from two parent families, and 47% of students came from single parent families. The remainder of the students were living with an adult other than their parents. Table 3 also shows the language spoken at home was most often English (83%) and students' families averaged 5.0 members.

There are some significant differences in demographics between the CTC Normed Database and the New Jersey students. This is true particularly for ethnicity. This makes it especially important, for interpretation of the survey analyses, that the CTC Matched Comparison be a primary means for understanding and interpreting the survey results.

There are some significant differences in demographics between the complete CTC Normative Database and the New Jersey students. This is true particularly for ethnicity. This makes it especially important, for interpretation of the survey analyses, that the CTC Normed Database be a primary means for understanding and interpreting the survey results. The construction of the CTC Matched Comparison is described in the next section.

Table 1. Students participating in the survey.

Grade	New Jersey				CTC Normed Database			
	Number of Students	Average Age	Percent Male	Percent Female	Number of Students	Average Age	Percent Male	Percent Female
6th					22,101	11.5	50%	50%
7th	4,588	12.8	51%	49%				
8th	4,017	13.8	51%	49%	22,969	13.6	49%	51%
All Grades	8,605	13.3	51%	49%	45,070	12.5	50%	50%

Table 2. Ethnicity of the students participating in the survey.

	New Jersey						CTC Normed Database					
Grade	Euro-Amer.	African-Amer.	Hispanic	Asian / Pac.	Native Amer.	Other	Euro-Amer.	African-Amer.	Hispanic	Asian / Pac.	Native Amer.	Other
6th							75%	6%	7%	2%	4%	5%
7th	69%	13%	10%	4%	0%	4%						
8th	67%	13%	12%	4%	0%	4%	77%	5%	7%	3%	3%	5%
All Grades	68%	13%	11%	4%	0%	4%	79%	5%	7%	3%	3%	4%

Table 3. Family characteristics of students participating in the survey.

Grade	New Jersey					CTC Normed Database				
	Family Makeup			Average Familiy Size	English is Primary Language at Home	Family Makeup			Average Familiy Size	English is Primary Language at Home
	Two Parent	One Parent	Other Adult			Two Parent	One Parent	Other Adult		
6th						68%	19%	13%	4.1	96%
7th	49%	46%	5%	5.0	84%					
8th	47%	48%	5%	5.0	83%	66%	20%	15%	4.0	96%
ll Grades	48%	47%	5%	5.0	83%	67%	18%	15%	4.1	96%

How New Jersey Results are Compared to the CTC Normative Database

Before discussing the findings of the survey, it is important to know how results from New Jersey students are compared to the CTC Normed Database. To begin with an example, Table 4 shows the percentage of New Jersey students at each surveyed grade level reporting the use of the most common substances: alcohol, cigarettes, smokeless tobacco, marijuana, and inhalants.

In Table 4 (and Graphs 1, 2 and 3a), ATOD use by New Jersey students is compared to normative data in two ways. In the column in the far right of Table 4, ATOD use as measured in the previous survey of middle school students conducted in 1995. While standard items were used, these two survey efforts were not specifically designed for longitudinal evaluation. Consequently generalizations regarding longitudinal trends in the data should be conducted with some caution.

A second normative comparison is also provided on Table 4. Because of the size of the CTC Six-State Normed Database, a "matched sample" of students was created, referred to as the CTC matched comparison. The CTC matched sample shows results based on data from students in the CTC Normative database whose demographic characteristics match New Jersey students exactly in terms of their age, ethnicity, and gender. This may be an especially important consideration for New Jersey for two reasons. First, demographic characteristics like age and sex are important correlates of risk and protective factors as well as drug use. Using the CTC Normative database, an exact demographic match can be obtained and thus, a valid comparison group can be constructed. Second, using the CTC Normative database, comparisons between New Jersey and national data are obtained providing another reference point with which to evaluate survey results.

To derive the most accurate interpretation of survey results, the CTC Matched Comparison is probably the best gauge for assessing New Jersey findings. Table 4 shows the results for ATOD use collected from the CTC Matched Comparison students. The CTC Matched Comparison sample generally provides the best overall comparison by which to assess New Jersey students' results.

Student Use of Alcohol, Cigarettes, Marijuana, and Inhalants.

Overall, New Jersey student use of the most common substances, alcohol, tobacco, marijuana, and inhalants, was at levels that are similar to current national trends.

Overall, New Jersey student use of the most common substances, alcohol, tobacco, marijuana, and inhalants, was at levels that are similar—if not slightly lower than—the matched sample from the CTC Normative database. The results are presented for three prevalence periods: lifetime (whether the student has ever used the substance), 12 month (whether the student has used the substance in the last year), and past 30 days (whether the student has used the substance in the last month). The lifetime prevalence period is the best measure of experimentation occurring among students. The 30-day prevalence period is considered the best measure of current use. The 12-month period was included as a point of comparison with the previous survey effort in New Jersey.

The lifetime prevalence period is the best measure of experimentation occurring among students. The 30-day prevalence period is considered the best measure of current use.

Given the CTC matched sample, the findings for New Jersey students suggested an average—or slightly lower—level of ATOD use among the surveyed students.

Alcohol. As is typical for almost all student populations, alcohol is the most widely used substance by students… One-fifth (20%) of the New Jersey 7th grade students and nearly one-third (30%) of 8th grade students reported using alcohol in the past 30 days.

Alcohol. As is typical for almost all student populations, alcohol is the most widely used substance by students. (See Table 4, Graph 1, Graph 2, and Graph 3a.) The lifetime prevalence rate for alcohol rises from 48% in 7th grade to 58% in 8th grade. For New Jersey students at each grade level, alcohol use is also similar to or lower than the grade-level specific CTC Matched Comparison Data. One-fifth (20%) of the New Jersey 7th grade students and nearly one-third (30%) of 8th grade students reported using alcohol in the past 30 days. Compared to the CTC matched sample, 2% fewer students in New Jersey reported alcohol use in the lifetime and 30-day prevalence rates. Finally, the results for binge drinking (defined as the student reporting that they have had five or more drinks in a row within the past two weeks) show that New Jersey students are reporting slightly lower than typical rates of alcohol use with 7% of 7th grade students and 13% of 8th grade students reporting having binged on alcohol in the previous two weeks.

Table 5a shows the distribution of student alcohol users responses to the question: "where do you usually get your alcoholic beverages from?" Most students (66%) indicated that they "don't drink", up from 51% in 1995. Those students that indicated that they do drink most often indicated that they obtained alcohol at home or from friends. This is comparable to

the 1995 New Jersey middle school students, who also got alcohol from home or friends a majority of the time. Overall, there is a decrease in where students get their alcohol from, across all sources.

Cigarettes. Tobacco (cigarettes and chewing tobacco) is usually the next most commonly used substance among adolescents; this is true for New Jersey students as well. As with alcohol, students reported cigarette use that is slightly lower than the CTC Matched Comparison benchmarks. Lifetime prevalence of cigarette use for New Jersey students was 33% for 7th grade students and 45% for 8th grade students. In New Jersey, 9% of 7th grade students and 16% of 8th grade students reported smoking cigarettes in the past 30-days. While exact statistical tests are not possible, these 30-day prevalence rates seem to be substantially lower than the rate obtained in 1995 (see Table 4). Also, when looking at the CTC Matched Comparison data, New Jersey students' cigarette use appears to be lower than the estimates obtained from the Six-State/CTC matched data.

Table 5b shows the distribution of student alcohol users responses to the question: "How do you usually get the cigarettes you smoke?" Most students (76%) indicated that they "don't smoke," compared to 67% of middle school students four years ago. Those that indicated that they do smoke most often indicated that they obtained cigarettes from friends. This is similar to 1995, where 15% of students obtained cigarettes from their friends. Consistent with the decrease in cigarette smoking by current middle school students, and the enforcement of the Synar Amendment, the percent obtaining cigarettes from all other possible sources also decreased in 1999.

Smokeless Tobacco. There was relatively little use of smokeless tobacco in comparison to cigarette use. This is almost always true of school age populations. Six percent of 7th grade students and 9% of 8th grade students indicated having used smokeless tobacco in their lifetime, while 3% of students reported recent use. Both lifetime and past 30-day use of smokeless tobacco were much lower compared to the CTC Matched Comparison sample.

In their lifetime, about 8% of 7th graders and 16% of 8th grade students in New Jersey have used marijuana…

Marijuana. In their lifetime, about 8% of 7th graders and 16% of 8th grade students in New Jersey have used marijuana. Thirty-day use of marijuana was 4% for 7th graders, and 10% for 8th graders. Overall, lifetime marijuana use was similar to, if not

As Table 4 and Graph 3a illustrate, past 30-day inhalant use was similar for 7th and 8th grade students. This is a common pattern where inhalant use increases rapidly through middle school and then declines in high school.

slightly lower than, the CTC Matched Comparison. Likewise, the past 30 day use of marijuana is similar to both the CTC Matched Comparison and 1995 Middle School survey findings.

Inhalants. Lifetime inhalant use was lower than expected among New Jersey students in comparison to the CTC Matched Comparison sample. As Table 4 and Graph 3a illustrate, past 30-day inhalant use was similar for 7th and 8th grade students. This is a common pattern where inhalant use increases rapidly through middle school and then declines in high school.

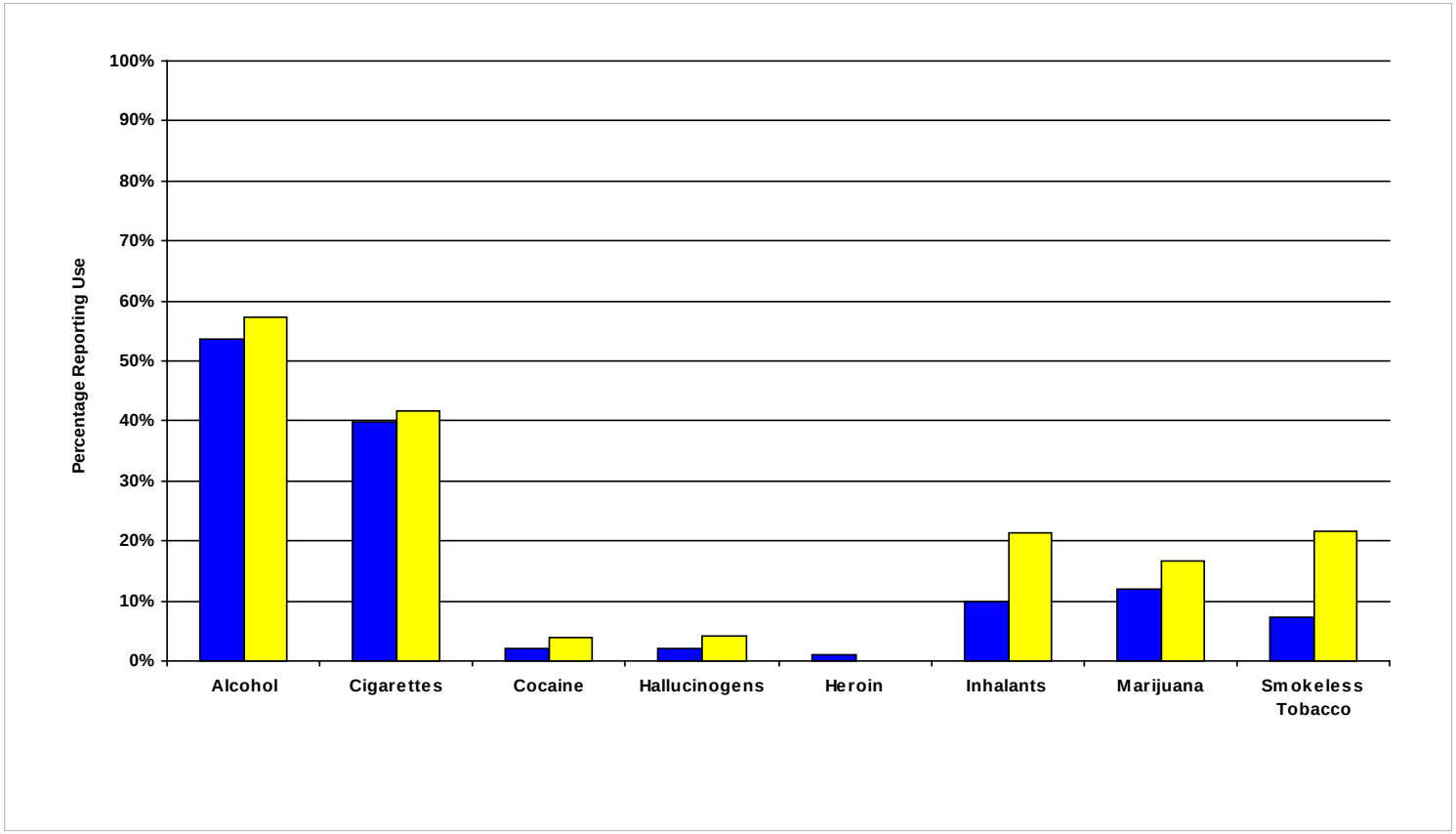
Table 4. The use of alcohol, tobacco, marijuana, and inhalants.

	New Jersey 1999			CTC Matched Comparison*			New Jersey 1995		
	7th	8th	Overall	7th	8th	Overall	7th	8th	Overall
Alcohol, Lifetime	48%	58%	53%	54%	62%	57%	52%	63%	57%
Alcohol, 12 Months	42%	51%	46%	--	--	--	44%	55%	49%
Alcohol, 30 Days	20%	30%	25%	22%	32%	27%	24%	36%	30%
Alcohol, Binge Drinking	7%	13%	10%	12%	18%	15%	--	--	--
Cigarettes, Lifetime	33%	45%	38%	38%	46%	42%	36%	44%	40%
Cigarettes, 12 Months	17%	24%	20%	--	--	--	29%	38%	33%
Cigarettes, 30 Days	9%	16%	13%	15%	22%	18%	16%	24%	20%
Smokeless Tobacco, Lifetime	6%	9%	7%	19%	25%	22%	--	--	--
Smokeless Tobacco, 30 Days	2%	4%	3%	7%	11%	9%	--	--	--
Marijuana, Lifetime	8%	16%	12%	13%	21%	17%	9%	18%	14%
Marijuana, 12 Months	6%	14%	10%	--	--	--	8%	17%	13%
Marijuana, 30 Days	4%	10%	7%	7%	13%	10%	5%	12%	8%
Inhalants, Lifetime	8%	8%	8%	19%	24%	21%	10%	11%	10%
Inhalants, 12 Months	7%	6%	7%	--	--	--	8%	9%	8%
Inhalants, 30 Days	4%	3%	3%	9%	12%	11%	4%	5%	4%

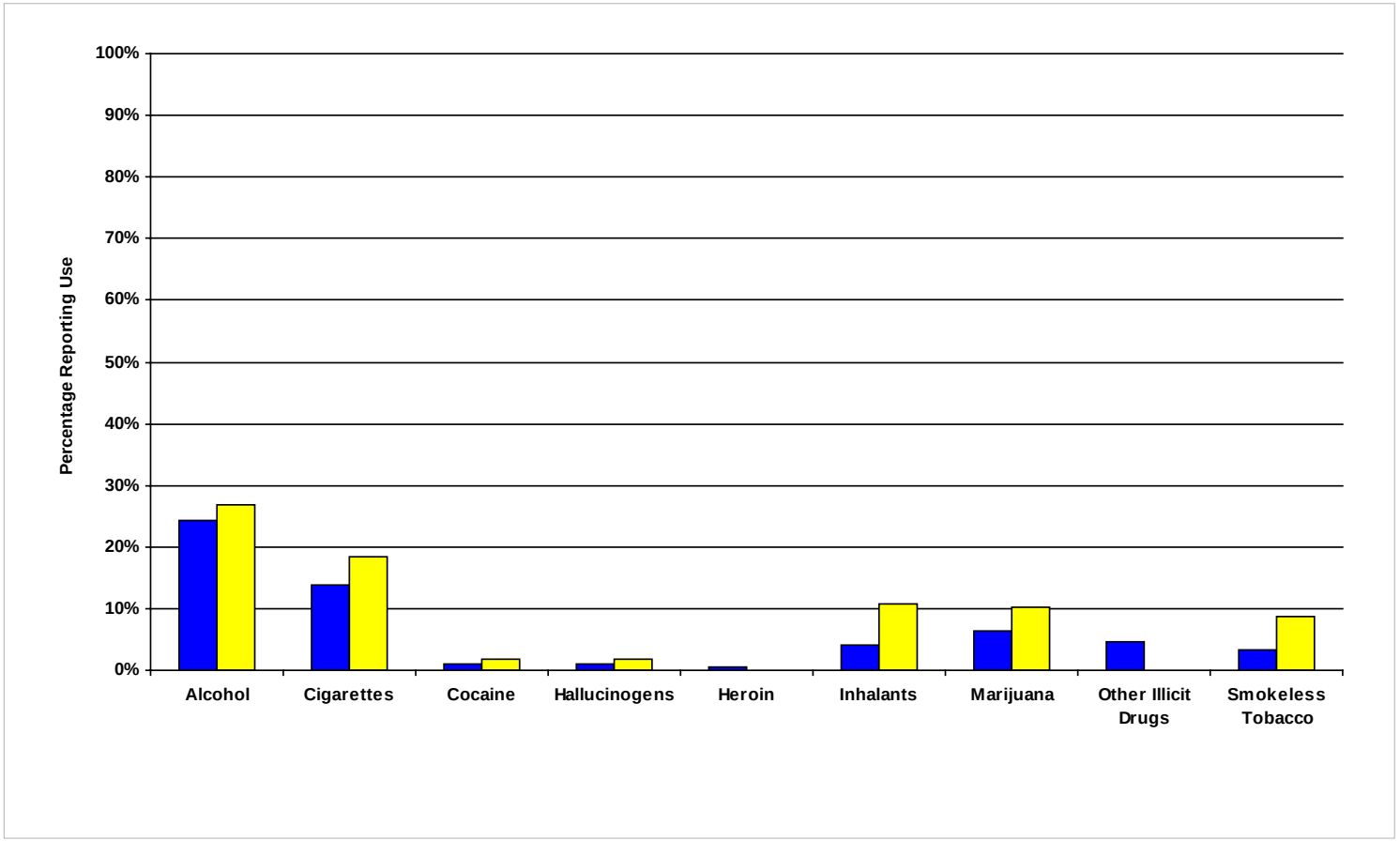
-- No comparison data available.

* Data matched to New Jersey on age, sex, and ethnicity.

Graph 1. The prevalence of lifetime use of alcohol, tobacco, and other drugs.



Graph 2. The prevalence of 30-day use of alcohol, tobacco, and other drugs.



Graph 3a. The prevalence of 30-day use of alcohol, cigarettes, marijuana, and inhalants.

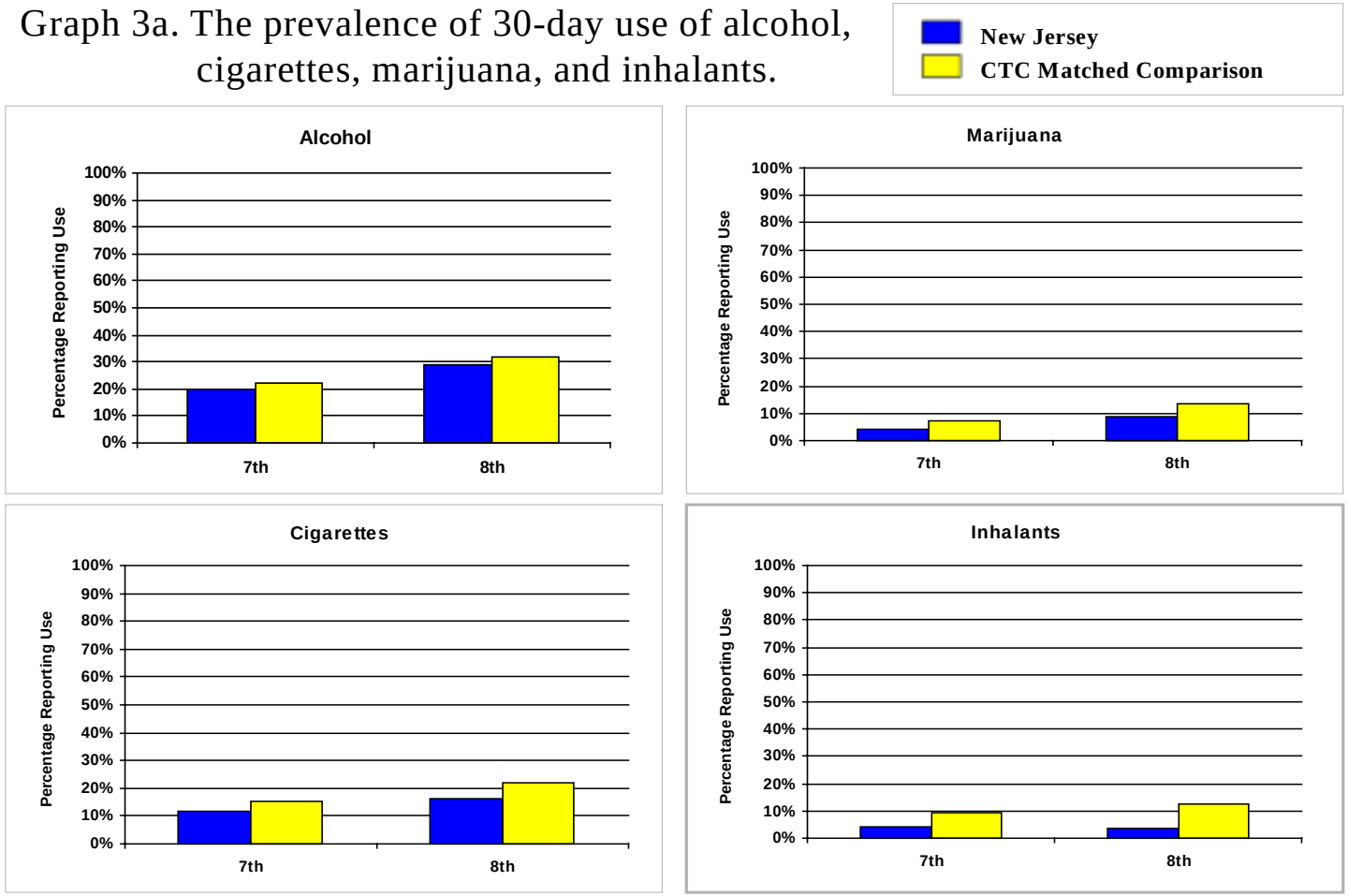


Table 5a. Source of Alcohol.

	New Jersey		
	7th	8th	Overall
From home	12%	14%	13%
From liquor stores	2%	3%	3%
From friends	9%	16%	13%
From bars/restaurants/lounges	1%	1%	1%
Other	5%	6%	6%
I don't drink	72%	59%	66%

Table 5b. Source of Cigarettes.

	New Jersey		
	7th	8th	Overall
From vending machines	2%	2%	2%
I buy them over the counter	2%	3%	2%
Someone else buys them for me	3%	6%	4%
From home	4%	3%	3%
From friends	9%	11%	10%
Other	3%	3%	3%
I don't smoke	79%	72%	76%

Student Use of Other Illicit Drugs

Table 6, and Graphs 1, Graphs 2, and Graphs 3b show the percentage of students from New Jersey, CTC Matched Comparison, and the 1995 New Jersey middle school survey who reported the use of illicit drugs other than marijuana and inhalants (Hallucinogens, cocaine, amphetamines, heroin, other narcotics, depressants, and steroids). As with Table 4, use is reported for three time periods in Table 6: lifetime, past 12 months, and in the past 30 days. The CTC Matched Comparison data are not available for all illicit drugs because the Six-State study did not collect certain data. Results for "Any Illicit Drug" are presented in Table 6. The prevalence of "Any Illicit Drug" is calculated by determining how many students used one or more of the illicit drugs, including inhalants, and is shown on Table 6.

The percentage of New Jersey students reporting the use of any illicit drug rises from 14% in the 7th grade to 15% in the 8th grade…About 8% of the students reported the use of an illicit drug in the past 30 days.

The percentage of New Jersey students reporting the use of any illicit drug rises from 14% in the 7th grade to 15% in the 8th grade. About 8% of the students reported the use of an illicit drug in the past 30 days. While no comparison data are available, these rates are sizeable and may be indicative of a core of drug-involved youth—students who use multiple drugs and are prone to other antisocial behaviors.

The rates of use for individual illicit drugs were much lower. Lower levels of use for specific illicit drugs (generally 10% or less) are typical of adolescent populations.

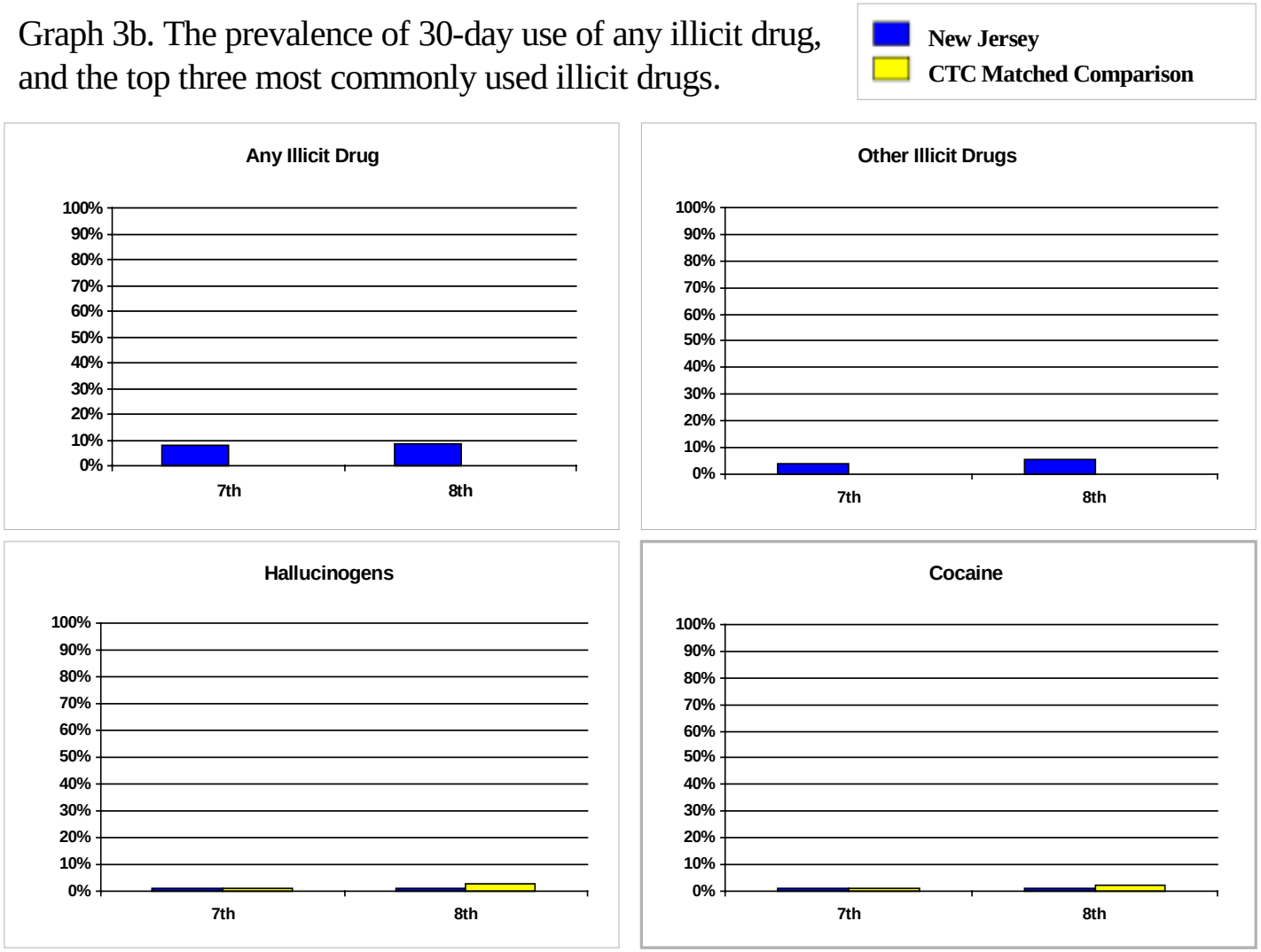
The rates of use for individual illicit drugs were much lower. Lower levels of use for specific illicit drugs (generally 10% or less) are typical of adolescent populations. Also, the use of illicit drugs (other than inhalants) tends to be concentrated in the upper grade levels. Thus, since the New Jersey survey was focused on middle school students, even lower rates were expected. Figure 3b shows the three most commonly used illicit drugs. Overall, other than inhalants, the most frequently used illicit drugs by New Jersey students were "Other Illicit Drugs" (drugs that were not individually listed in the instrument). Eight percent of 7th grade and 10% of 8th grade students in New Jersey reported the use of other illicit drugs at least once in their lifetime. About 4% of New Jersey students reported that they had used other illicit drugs in the past 30 days. New Jersey students reported a lower level of use of cocaine and hallucinogens.

Table 6. The use of illicit drugs (excluding Marijuana).

	New Jersey 1999			CTC Matched Comparison*			New Jersey 1995		
	7th	8th	Overall	7th	8th	Overall	7th	8th	Overall
Any Illicit Drug, Lifetime	14%	15%	14%	--	--	--	--	--	--
Any Illicit Drug, 12 Months	11%	13%	12%	--	--	--	--	--	--
Any Illicit Drug, 30 days	7%	9%	8%	--	--	--	--	--	--
Hallucinogens, Lifetime	1%	3%	2%	3%	6%	4%	--	--	--
Hallucinogens, 12 Months	1%	3%	2%	--	--	--	--	--	--
Hallucinogens, 30 Days	1%	1%	1%	1%	3%	2%	--	--	--
Cocaine, Lifetime	1%	3%	2%	3%	5%	4%	2%	3%	3%
Cocaine, 12 Months	1%	2%	1%	--	--	--	2%	3%	2%
Cocaine, 30 Days	1%	1%	1%	1%	2%	2%	1%	2%	1%
Heroin, Lifetime	1%	1%	1%	--	--	--	--	--	--
Heroin, 12 Months	0%	1%	1%	--	--	--	--	--	--
Heroin, 30 Days	0%	1%	1%	--	--	--	--	--	--
Other Illicit Drugs, Lifetime	8%	10%	9%	--	--	--	--	--	--
Other Illicit Drugs, 12 Months	5%	8%	6%	--	--	--	--	--	--
Other Illicit Drugs, 30 Days	3%	6%	4%	--	--	--	--	--	--

-- No comparison data available.
* Data matched to New Jersey on age, sex, and ethnicity.

Graph 3b. The prevalence of 30-day use of any illicit drug, and the top three most commonly used illicit drugs.



The Prevalence of Antisocial Behavior.

Information on antisocial behavior was collected for the past 12 months. A small proportion of New Jersey students reported that they had engaged in several different kinds of antisocial behavior within the last year. As shown in Table 7, New Jersey students reported rates of antisocial behaviors that were comparable with the CTC Matched Comparison as well as the previous survey effort.

Across the eight antisocial behaviors measured, New Jersey was comparable to both the CTC Matched Comparison and the previous survey effort. The finding that continues to stand out among New Jersey students is the percentage of students reporting that they have "Attacked Someone with the Intention of Hurting Them." One-fifth of New Jersey's middle school students reported that they had "Attacked Someone with The Intention of Hurting Them." This percentage is consistent with the CTC Matched data and the 1995 New Jersey Middle School Survey findings.

School suspension is another indicator of problem behavior that is somewhat elevated in New Jersey students. Sixteen percent of 7th grade students and 17% of 8th grade students reported having been suspended from school. Suspension rates among New Jersey 7th grade students are higher than suspension rates in the CTC Matched Comparison data. It should be noted that it is difficult to interpret school suspension rates, because school suspension rates vary substantially from district to district depending on district policies and practices. It is conceivable that, in New Jersey as a whole, school district policies may be more supportive of suspension than is found nationally. If that is the case, then this measure may not be indicating abnormally high rates of antisocial behavior.

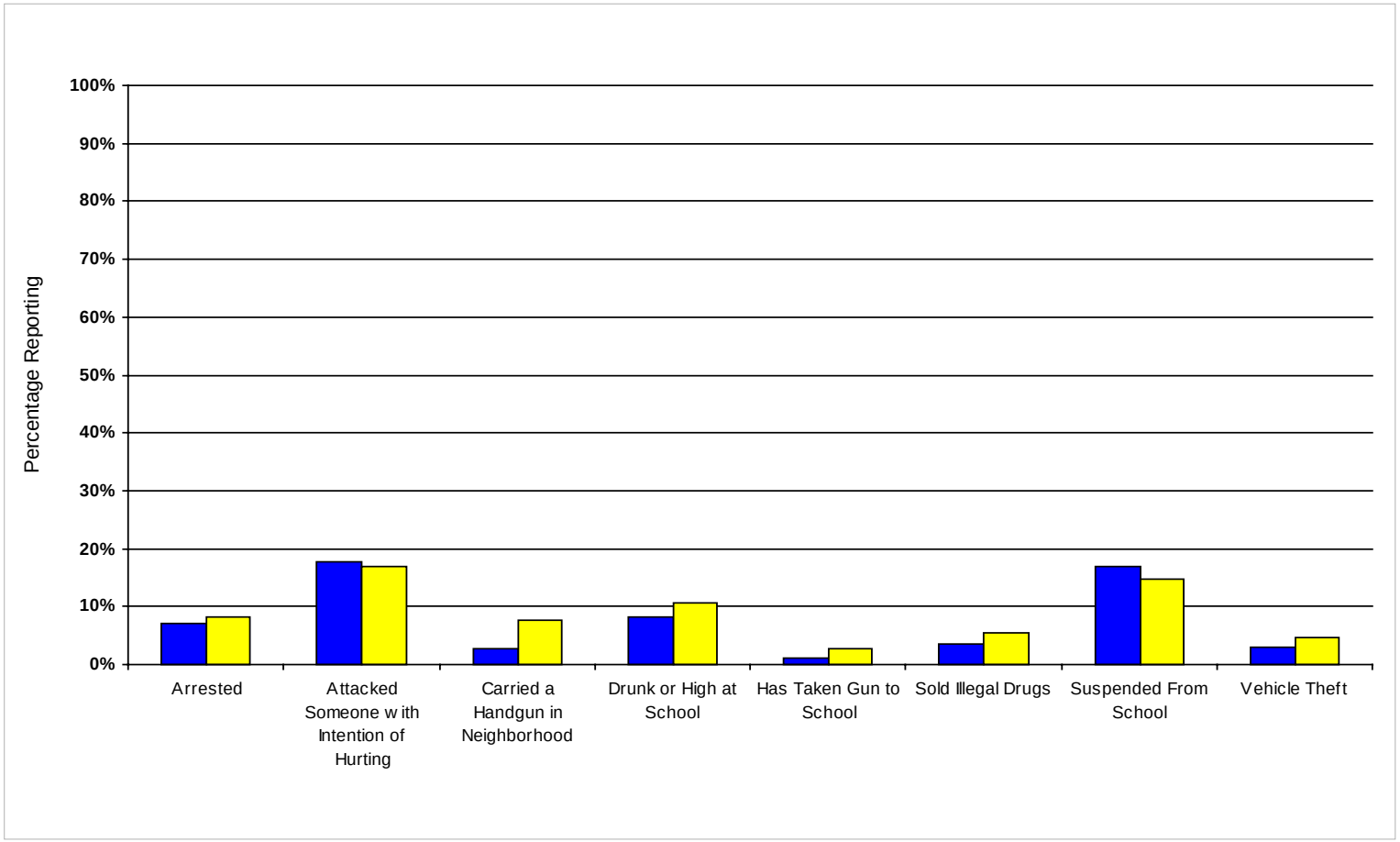
Table 7. The prevalence of delinquent behavior.

	New Jersey 1999			CTC Matched Comparison*		
	7th	8th	Overall	7th	8th	Overall
Arrested	6%	8%	7%	7%	10%	8%
Attacked Someone with Intention of Hurting	17%	18%	18%	15%	19%	17%
Carried a Handgun in Neighborhood	2%	3%	3%	6%	9%	7%
Drunk or High at School	7%	10%	8%	8%	14%	10%
Has Taken Gun to School	1%	1%	1%	2%	4%	3%
Sold Illegal Drugs	2%	5%	3%	4%	7%	5%
Suspended From School	16%	17%	17%	13%	17%	15%
Vehicle Theft	2%	3%	3%	4%	6%	5%

-- No comparison data available.

* Data matched to New Jersey on age, sex, and ethnicity.

Graph 4. The prevalence of delinquent behaviors in the past year.



The Risk and Protective Factor Profile of New Jersey Students

The analysis of risk and protective factors for New Jersey students is approached from two different directions. In the first analysis, the overall, aggregate level of risk and protective factors is examined. The overall level of risk and protection is highly predictive of both positive and negative behavioral outcomes in adolescent populations. When looking at a large group, like New Jersey students, it is very useful to assess the overall level of risk and protection. In this section, the prevalence of specific risk and protective factors is examined. While the aggregate level of risk and protection predicts the overall success of the students, it is the specific risk and protective factors that become the targets of prevention efforts.

The analysis of risk and protective factors is the most powerful paradigm available for understanding the genesis of both positive and negative adolescent behavioral outcomes and how the most successful adolescent prevention programs can be designed.

The Importance Of Risk and Protective Factors in Adolescent Behavior

Research during the past 30 years supports the view that ATOD use, delinquency, school achievement, and other important outcomes in adolescence, are associated with specific characteristics in the student's community, school, family environment, and individual characteristics. These characteristics are called *risk* or *protective factors*.

Risk factors are characteristics that are known to increase the likelihood that a student will engage in one or more problem behaviors. For example, one risk factor in the community environment is the existence of laws and norms favorable to drug use. In those communities where there is acceptance or tolerance of drug use, students are more likely to engage in ATOD use.

Protective factors are characteristics in the student's community, school, family, and individual environments 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 analysis of risk and protective factors is the most powerful paradigm available for understanding the genesis of both positive and negative adolescent behavioral outcomes and how the most successful adolescent prevention programs can be designed.

(See Appendix B for a description of each of the risk and protective factors.)

There is a substantial amount of research showing that exposure of adolescents to a greater number of risk factors, irrespective of what the specific risk factors are, is associated with more substance 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, et al, 1998; Pollard & Lofquist, 1998; Pollard, Hawkins & Arthur, 1999).

We interpret risk and protective factor scale scores relative to the CTC Normed Six-State database scales. A student's risk or protective factor scale score is expressed as an average scale score, 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 student outcomes, it is better to have protective factor scores with high values.

To create a standard measure of overall risk and protection, two measures are calculated. These are called the aggregate risk factor score and the aggregate protective factor score. For the risk factor score, the average score across all 24 of the risk factor scales is calculated. For the protective factor score, the average scores across all 10 of the protective factor scales are calculated.

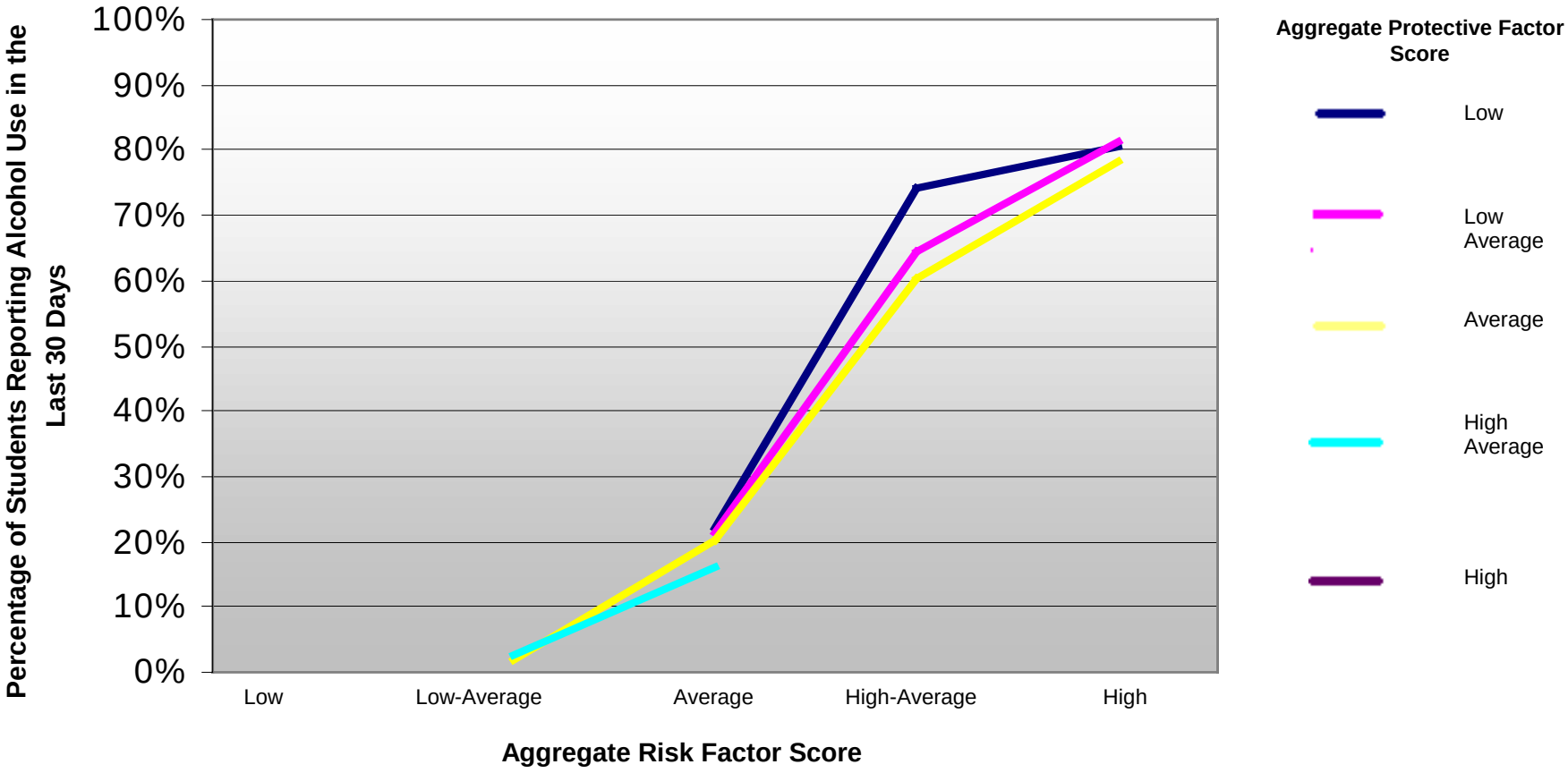
The role of risk and protective factors in ATOD and antisocial behavior prevalence can be appreciated by examining Graph 5. Graph 5 shows the percentage of New Jersey students reporting the use of alcohol in the past 30 days, based on how many risk and protective factors were measured in the student's background. This number of risk and protective factors is the aggregate risk factor score and the aggregate protective factor score that is discussed in the previous paragraph. In Graph 5, these aggregate RPF scores are classified by 5 categories: low, low-average, average, high-average, and high. These classifications are based on a standardized distribution of aggregate risk and aggregate protection, which was then divided into five categories of –2/-1/0/+1/+2 standard deviations. (0 represents the mean aggregate

risk factor score, +1 is one standard deviation away from the mean, and so forth). In turn, these categories were translated as low, low-average, etc., for easier understandability for a larger array of audiences.

There are two important points to be drawn from Graph 5. First, Graph 5 shows clearly that it is the levels of risk and protection in combination that determines an adolescent's likelihood of current alcohol use (as well as all other problem behaviors). Graph 5 shows that as students increase in their level of risk, the likelihood that they will be currently drinking goes up dramatically. For students showing low-average risk factors, the likelihood that the student will be currently drinking averages about 10%. For students at the high-average level of risk, the average is about 75%. But, at each level of risk, the level of protection makes a significant difference. For example, at the low level of risk, students with the high level of protection are still even less likely to be currently using alcohol; students with no protection are the most likely to be using alcohol. This pattern is true for all levels of risk. In short, it is the combination of risk and protection that determines the student behavior.

The second important point in Graph 5 is that there are no data points plotted for students who have both high levels of risk and high levels of protection. This is because the presence of protective factors is inversely related to the presence of risk factors. In other words, the evidence indicates that environments with high levels of risk do not allow for the presence of high levels of protection. This suggests that prevention programming that focuses solely on risk, or solely on protection, is not feasible. Instead, both risk and protective factors must be addressed for prevention programming to be successful

Graph 5. Prevalence of Current Alcohol Use, by Number of Risk and Protective Factors in the Students' Background New Jersey Middle School Survey of 7th and 8th grade students.



The Risk and Protective Factor Profile of New Jersey Middle School Students

Average Levels of Risk and Protection. New Jersey students reported risk levels that are typical. New Jersey students also report average protection scores that are very similar to the expected values. Across all grade levels, the average risk factor scale score was 48, and the average protective factor score was 49. Both of these numbers are very close to the national average (50). This level of risk and protection is consistent with New Jersey students showing similar levels of ATOD use and delinquency to national norms, when compared both by grade level and with the CTC matched comparison sample.

The Risk and Protective Factor Profile. The average levels of risk and protective factors in a student population predicts the probability of negative and positive behaviors in a student population. However, prevention programming should be targeted at the specific risk that are most prevalent or the protective factors that are most suppressed in the population being served. That is, the most effective prevention programs identify what risk factors are elevated in the student population, what protective factors are suppressed, and then will implement prevention programming that specifically targets the identified risk or protective factors.

To support this process, a risk and protective factor "profile" is developed for New Jersey students by calculating the average value of each risk and protective factor scales across all New Jersey students. Table 8 and Graph 6 show the results for all 10 protective factors measured as a percentile equivalent score for the entire CTC Normed database, which is the best available data for adolescents in the United States. A score at 50 means that the level of the protective factor for New Jersey students was equal to the CTC Normed database average. Conversely, a score below 50 means that the level of the protective factor for New Jersey students was lower than the CTC Normed database average. In addition, protective factor scores based on the CTC exact match (i.e., age, ethnicity, and gender) are also provided on Table 8 and Graph 6. Because protective factors serve to reduce the likelihood of negative adolescent outcomes, it is desirable for the protective factors to be as high as possible for New Jersey students.

With one exception, New Jersey students showed similar protective factor scores compared to the CTC Matched Comparison data. There was one protective factor where New Jersey students scored noticeably lower than the CTC Matched Comparison data: *Opportunities for Positive Involvement in the Community*. This protective factor assesses students' perceptions of the opportunities they have within their community for participation in organizations and activities that are prosocial (sports teams, scouting, boys and girls clubs). This protective factor is a likely target for many communities' prevention programming. Note that perceptions can often deviate from reality—the existence of such programs does not necessarily mean that students feel like they have access to them.

Across all domains there were some risk factors that were elevated, both above the national average and above the CTC Matched Comparison, and there were some risk factors that were lower than both benchmarks.

Table 8 and Graphs 7a and 7b show the risk factor profile for New Jersey students. The most elevated risk factor was in the Community domain: *Community Disorganization*. This risk factor was substantially above the comparison data. This risk factor measures student's self-report of student perceptions of stability in their community. It is based on five questions that include an item regarding safety in the neighborhood and the prevalence of crime, fights, abandoned buildings and graffiti. New Jersey students are clearly indicating that they see their neighborhoods as more disorganized than many other students across the country.

Two other risk factors, that were noticeably higher than the CTC Matched Comparison, were uncovered in the School domain: *Academic Failure* and *Low School Commitment*. Academic failure measures student's self-report of their academic performance. It is based on two questions: "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?" New Jersey students are clearly indicating that they do not think they are doing as well academically as other students in the comparison group. Also note the slightly elevated level of low commitment to school. In short, students reported that they were not making good academic progress and report feeling less committed to school than did the Matched Comparison Sample.

These results contrast with two risk factors that are lower than expected: students' *perceptions of the community laws and norms around antisocial behavior* and *student perceived availability*. Compared to the national average, New Jersey

students understand the laws and norms of their communities towards antisocial behaviors better. They also see drugs as more risky than students in the CTC Matched Comparison data. Family history of antisocial behavior was also lower than both the national average, as well as the CTC Matched Comparison.

Taken together, the risk and protective factor profiles indicate that New Jersey students have several strengths (*Laws and Norms; Perceived Risks of Drug use; Family History of Antisocial Behavior*), but also that there are some specific areas where prevention programming efforts might be applied (*Community Opportunities for Prosocial Involvement; Community Disorganization; Academic Failure,* and; *Low School Commitment*).

In sum, at the statewide level, there are obvious strengths in the risk and protective factor profiles, but there are also areas where improvement would be desirable. The value of the risk and protective factor profiles is that the specific prevention targets, most appropriate for New Jersey students, are now identified. Given this, the next step in the prevention process is the selection and implementation of the right program to address the demonstrated needs—specifically down at the lower levels of aggregation (county, school district, or school). There are a number of prevention programs, which have been proven to be successful with adolescent populations that can address the specific risk and protective factors identified for New Jersey students. This information can be found in the Community that Care, Promising Approaches Guide, available through Developmental Research and Program, Inc.

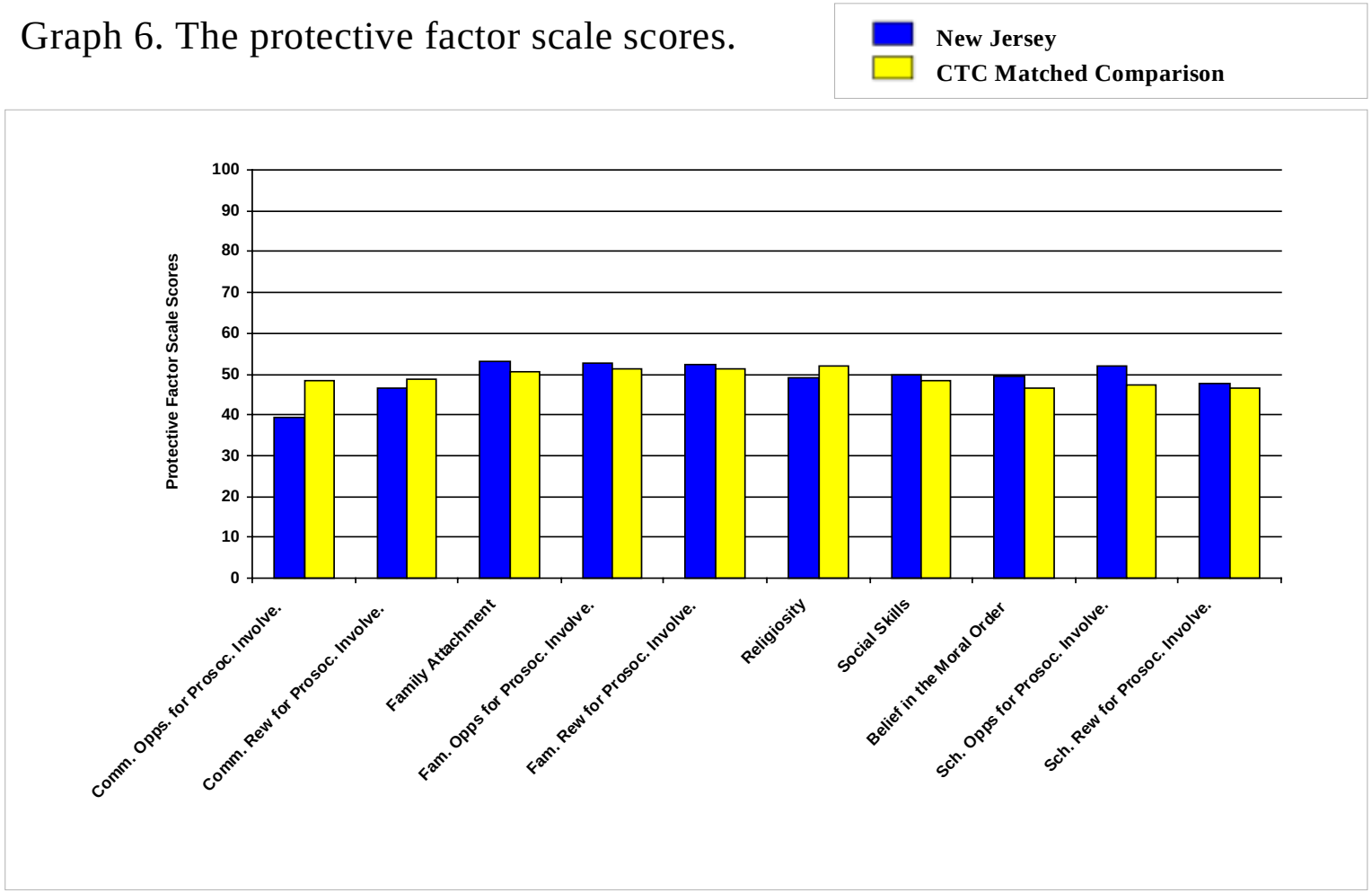
Table 8. Risk and Protective Factor Scale Scores.

	New Jersey	CTC Matched Comparison Scores
Protective Factor Scores		
Community Domain		
Community Opportunities for Prosocial Involvement	39	48
Community Rewards for Prosocial Involvement	47	49
Family Domain		
Family Attachment	53	50
Family Opportunities for Positive Involvement	53	51
Family Rewards for Positive Involvement	53	51
School Domain		
School Opportunities for Prosocial Involvement	52	47
School Rewards for Prosocial Involvement	48	47
Individual-Peer Domain		
Religiosity	49	52
Social Skills	50	48
Belief in the Moral Order	49	47
Total Average Protection	***49***	***49***
Behavior Outcomes		
Behavioral Outcomes		
Current ATOD Use	45	48
Current Antisocial Behavior	51	52
Gang Involvement	47	52

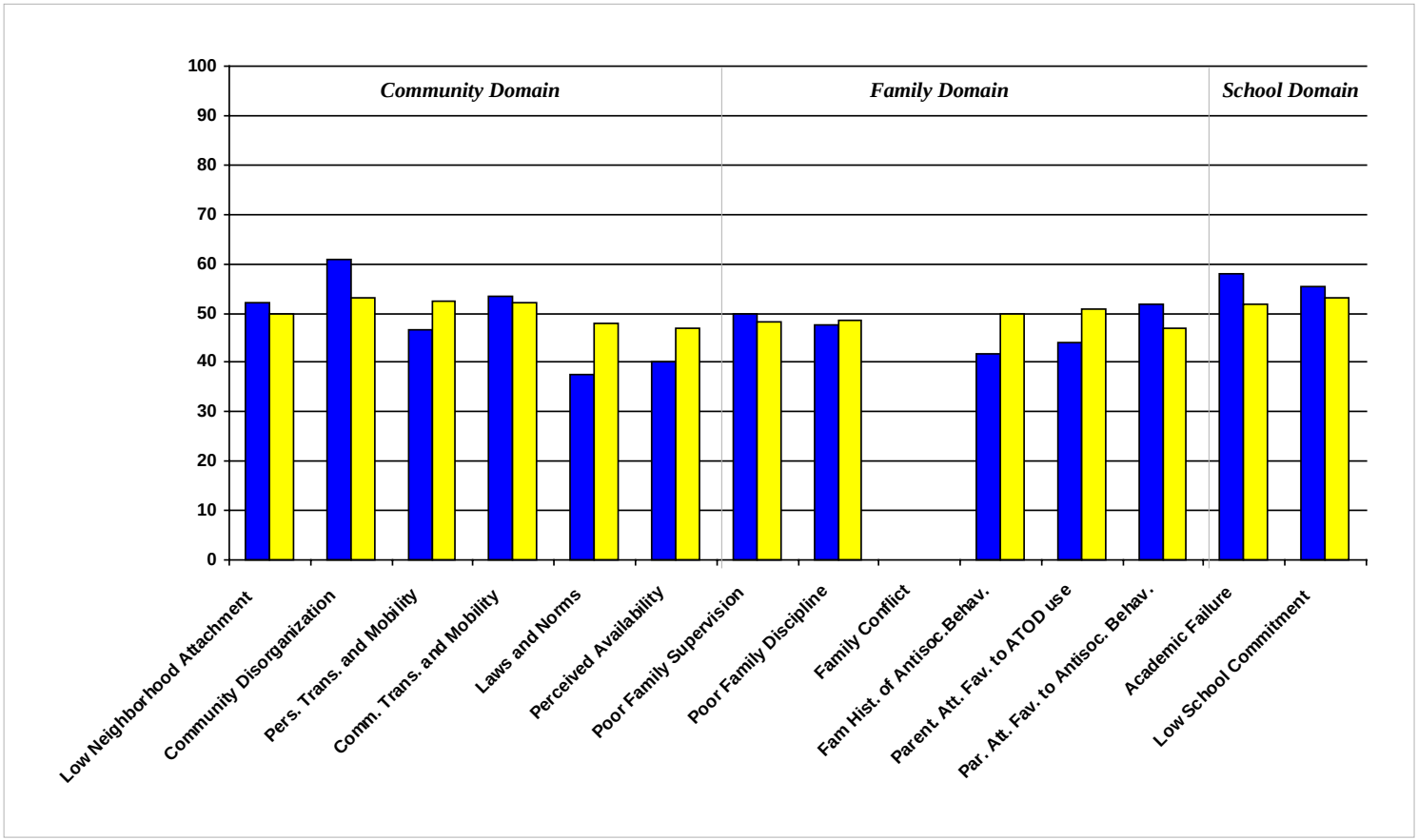
Table 8. Risk and Protective Factor Scale Scores (cont).

	New Jersey	CTC Matched Comparison Scores
Risk Factor Scores		
Community Domain		
Low Neighborhood Attachment	52	50
Community Disorganization	61	53
Personal Transitions and Mobility	47	53
Community Transitions and Mobility	53	52
Laws and Norms	38	48
Perceived Availability	40	47
Family Domain		
Poor Family Supervision	50	48
Poor Family Discipline	48	48
Family Conflict		
Family History of Antisocial Behavior	42	50
Parental Attitudes Favorable to ATOD use	44	51
Parental Attitudes Favorable to Antisocial Behavior	52	47
School Domain		
Academic Failure	58	52
Low School Commitment	55	53
Individual-Peer Domain		
Rebelliousness	46	53
Friends' Delinquent Behavior	54	53
Friends' Use of Drugs	45	47
Peer rewards for Antisocial Behavior	45	51
Favorable Attitudes Towards Antisocial Behavior	47	52
Favorable Attitudes Towards ATOD Use	43	47
Perceived Risks Drug Use	40	48
Early Initiation	48	53
Impulsiveness	53	53
Sensation Seeking	50	49
Total Average Risk	***48***	***48***

Graph 6. The protective factor scale scores.

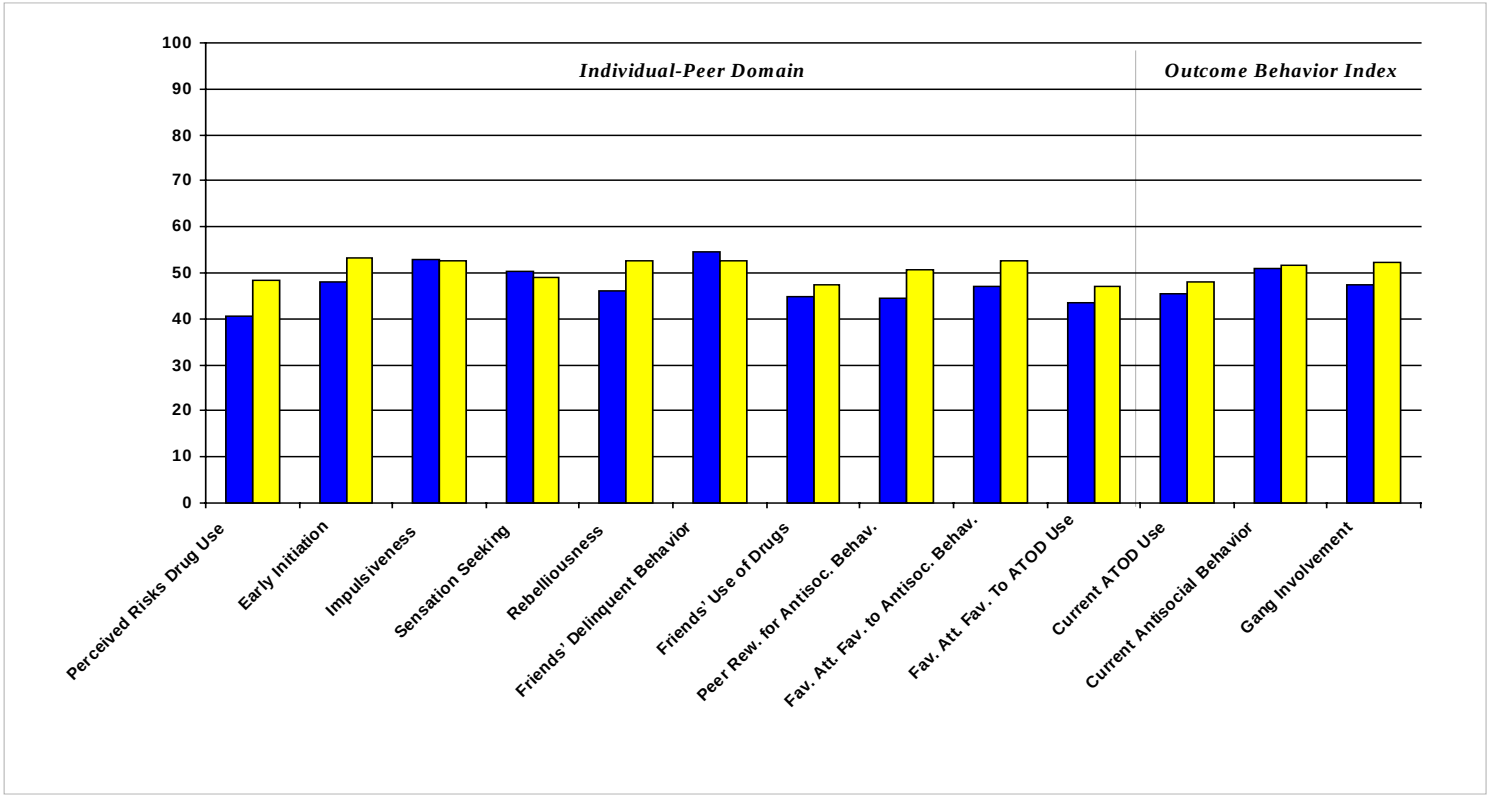


Graph 7a. Community, family, and school domain risk factor scale scores.



**Family Conflict scale is currently under revision.*

Graph 7b. Individual-peer domain risk factor scale scores and outcome behavior indexes.



Peer Leadership Schools

The following set of tables and graphs compare Peer-Leadership schools (PLS) to a matched sample from the CTC Normative Database, as well as to the non-PLS New Jersey students. It should be noted that PLS schools were not drawn randomly from the population of PLS schools, and consequently, the following data does not generalize well to PLS schools. Furthermore, the State of New Jersey 1999 CTC Youth Survey was not designed as a program evaluation tool, and the data derived should not be treated as such.

Demographics. PLS schools had a higher proportion of ethnic minority students in both 7th and 8th grade. They were also less likely to speak English as the primary language in the home and have slightly larger families.

Student use of Alcohol, Tobacco, Other Drugs and Involvement in Delinquent Behavior. When compared to the rest of New Jersey, students from PLS were very similar rates of involvement with all substances, as well as delinquent behavior.

Risk and Protective Factor Profile. When compared to New Jersey, students from PLS schools reported nearly identical levels for all protective factors. Their risk factor profile, however, differed. Specifically, PLS students were higher on many of the risk factors in the Community Domain. PLS students showed higher levels of *Low Neighborhood Attachment* and *Community Disorganization* than the rest of New Jersey. *Friends' Delinquent Behavior* was also higher than non-PLS students or the CTC Matched Comparison students.

Conclusions

New Jersey middles school students are diverse where 47% of the students came from single parent families, 13% were African American and 11% were Hispanic.

The survey showed that middle school students start ATOD use early in their life. At the time of the survey, 57% of the students have already used alcohol, 38% have smoked cigarettes, 12% have used marijuana and 10% have used inhalants. Consistent with the State and Federal efforts to restrict youth access to cigarettes, and possibly in part because of the recent increase in cigarette, cigarette smoking has declined substantially from 20% in 1995 to 13% in 1999.

Even though alcohol and other drugs use appears to have declined since 1995, middle school students continue to experiment with several drugs including hard core drugs. In the 12 months prior to the survey, 2% used hallucinogens, 1% used cocaine and 6% used other drugs not listed by name in the survey. Some 1% reported using heroin in their lifetime.

Compared to the rest of New Jersey, students from PLS had similar rates of ATOD use. PLS students were, however, higher on many of the risk factors in the *Community Domain* compared to students in non-PLS schools. PLS students showed higher levels of *Low N*eigh*borhood Attachment* and *Community Disorganization* than the non-PLS students. *Friends' Delinquent Behavior* was also higher than non-PLS students or the CTC Matched Comparison students.

New Jersey middle school students perceive that drugs are risky and they report low family history of antisocial behavior. These and other risk and protective factor profiles suggest that New Jersey middle school students have several strengths that can be explored further for effective prevention planning. A continued monitoring of the prevalence of ATOD use among middle school students and the measurement of risk and protective factors will be of vital public health importance.

Table 9. Students participating in the survey.

Grade	PLS				CTC Normed Database			
	Number of Students	Average Age	Percent Male	Percent Female	Number of Students	Average Age	Percent Male	Percent Female
6th					22,101	11.5	50%	50%
7th	1,398	12.9	51%	49%				
8th	1,142	13.9	51%	49%	22,969	13.6	49%	51%
All Grades	2,540	13.4	51%	49%	45,070	12.5	50%	50%

Table 10. Ethnicity of the students participating in the survey.

	PLS						CTC Normed Database					
Grade	Euro-Amer.	African-Amer.	Hispanic	Asian / Pac.	Native Amer.	Other	Euro-Amer.	African-Amer.	Hispanic	Asian / Pac.	Native Amer.	Other
6th							75%	6%	7%	2%	4%	5%
7th	49%	19%	25%	3%	0%	4%						
8th	37%	22%	34%	2%	1%	5%	77%	5%	7%	3%	3%	5%
All Grades	43%	20%	29%	2%	1%	4%	79%	5%	7%	3%	3%	4%

* National comparison data is taken from the CTC Six-State database.

Table 11. Family characteristics of students participating in the survey.

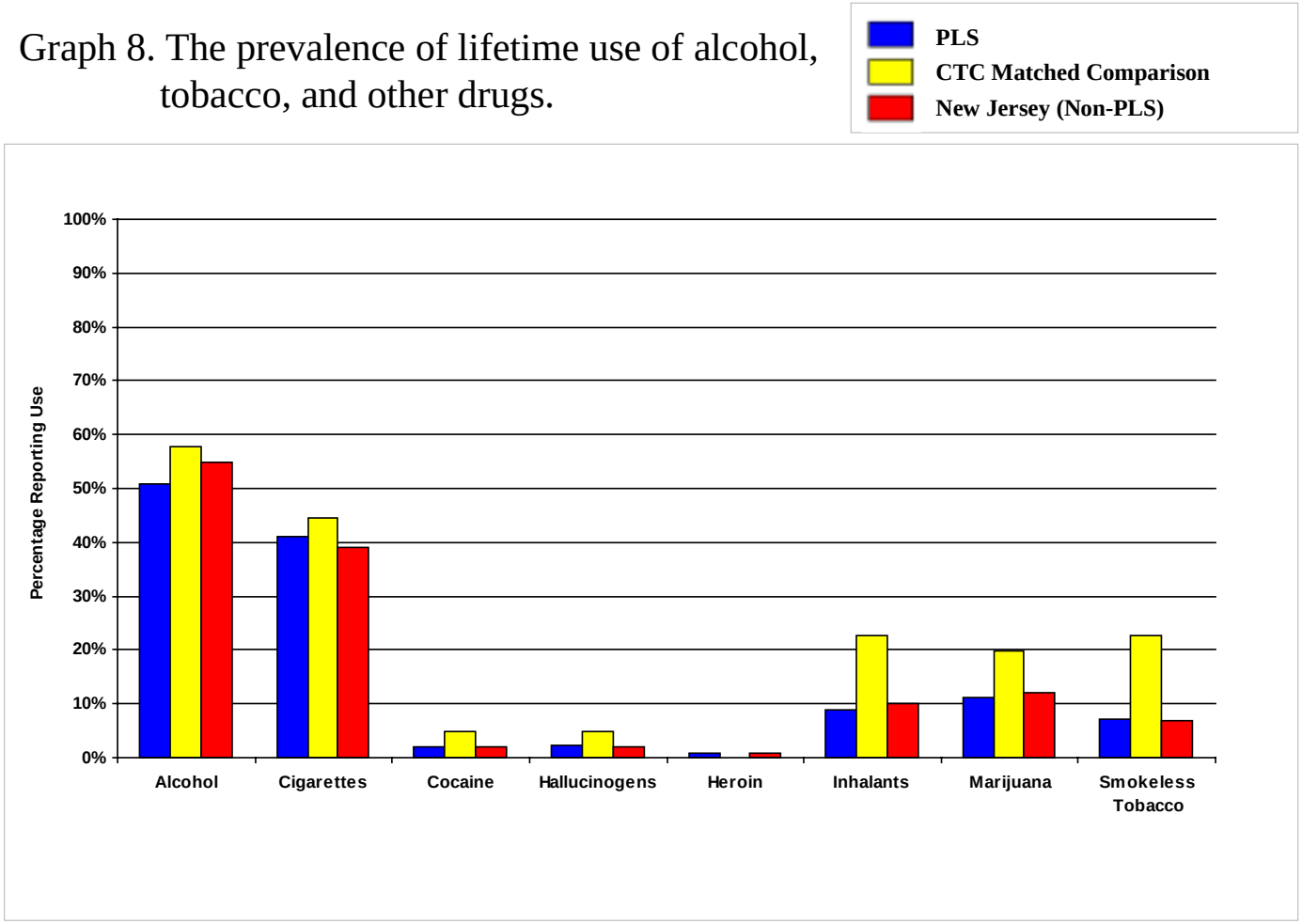
Grade	PLS					CTC Normed Database				
	Family Makeup			Average Familiy Size	English is Primary Language at Home	Family Makeup			Average Familiy Size	English is Primary Language at Home
	Two Parent	One Parent	Other Adult			Two Parent	One Parent	Other Adult		
6th						68%	19%	13%	4.1	96%
7th	48%	45%	6%	5.3	72%					
8th	48%	47%	5%	5.5	68%	66%	20%	15%	4.0	96%
All Grades	48%	46%	6%	5.4	70%	67%	18%	15%	4.1	96%

Table 12. The use of alcohol, tobacco, marijuana, and inhalants.

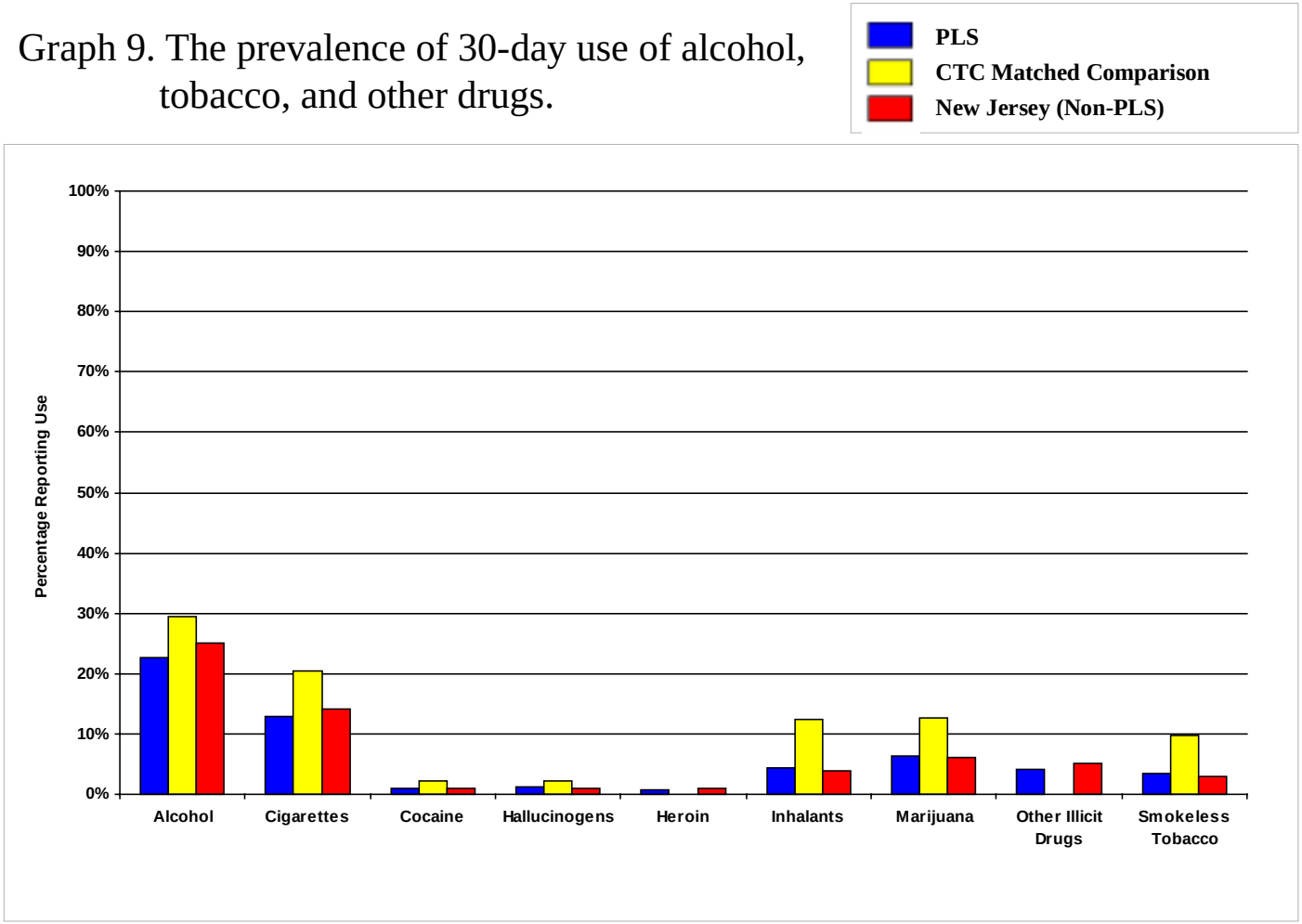
	PLS			CTC Matched Comparison*			New Jersey (Non-PLS)		
	7th	8th	Overall	7th	8th	Overall	7th	8th	Overall
Alcohol, Lifetime	48%	54%	51%	54%	62%	58%	49%	61%	55%
Alcohol, 12 Months	42%	48%	45%	--	--	--	42%	54%	47%
Alcohol, 30 Days	19%	27%	23%	24%	35%	29%	20%	30%	25%
Alcohol, Binge Drinking	8%	12%	10%	14%	22%	18%	7%	12%	9%
Cigarettes, Lifetime	36%	47%	41%	40%	49%	44%	34%	45%	39%
Cigarettes, 12 Months	19%	24%	21%	--	--	--	18%	26%	22%
Cigarettes, 30 Days	12%	14%	13%	17%	25%	20%	11%	17%	14%
Smokeless Tobacco, Lifetime	7%	8%	7%	20%	26%	23%	6%	9%	7%
Smokeless Tobacco, 30 Days	3%	3%	3%	8%	12%	10%	3%	4%	3%
Marijuana, Lifetime	8%	15%	11%	15%	25%	20%	8%	17%	12%
Marijuana, 12 Months	7%	12%	10%	--	--	--	6%	14%	10%
Marijuana, 30 Days	4%	9%	6%	9%	17%	13%	4%	9%	6%
Inhalants, Lifetime	9%	9%	9%	21%	25%	23%	10%	11%	10%
Inhalants, 12 Months	8%	8%	8%	--	--	--	8%	8%	8%
Inhalants, 30 Days	4%	4%	4%	11%	15%	12%	4%	3%	4%

-- No comparison data available.
* Data matched to New Jersey on age, sex, and ethnicity.

Graph 8. The prevalence of lifetime use of alcohol, tobacco, and other drugs.



Graph 9. The prevalence of 30-day use of alcohol, tobacco, and other drugs.



Graph 10a. The prevalence of 30-day use of alcohol, cigarettes, marijuana, and inhalants.

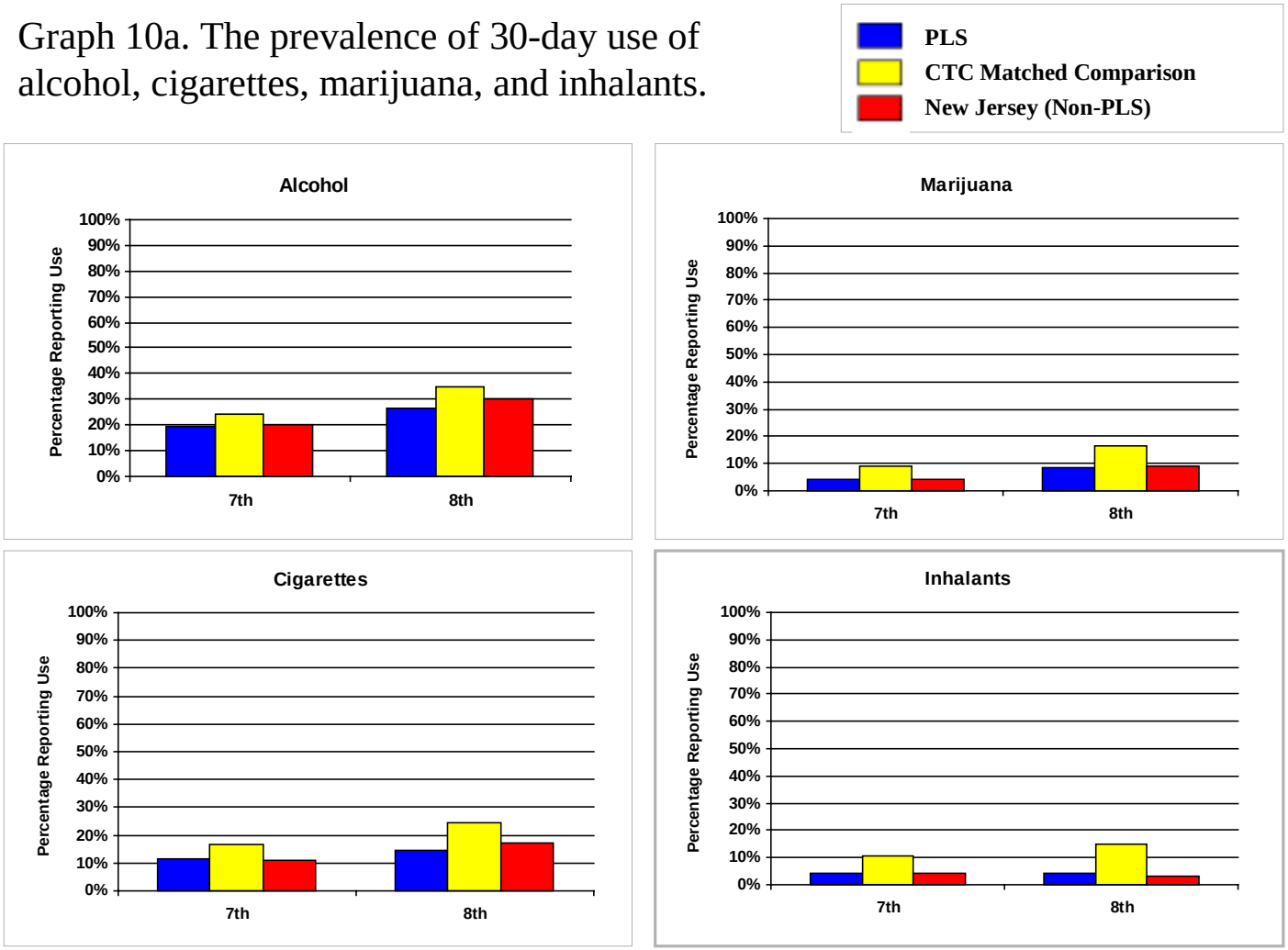


Table 13a. Source of Alcohol.

	PLS		
	7th	8th	Overall
From home	13%	16%	14%
From liquor stores	2%	4%	3%
From friends	9%	14%	11%
From bars/restaurants/lounges	0%	0%	0%
Other	6%	7%	6%
I don't drink	70%	58%	64%

Table 13b. Source of Cigarettes.

	PLS		
	7th	8th	Overall
From vending machines	3%	3%	3%
I buy them over the counter	2%	3%	3%
Someone else buys them for me	3%	4%	4%
From home	3%	3%	3%
From friends	8%	12%	10%
Other	3%	3%	3%
I don't smoke	78%	71%	75%

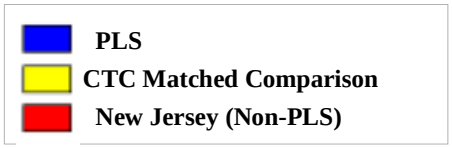
Table 14. The use of illicit drugs (excluding Marijuana).

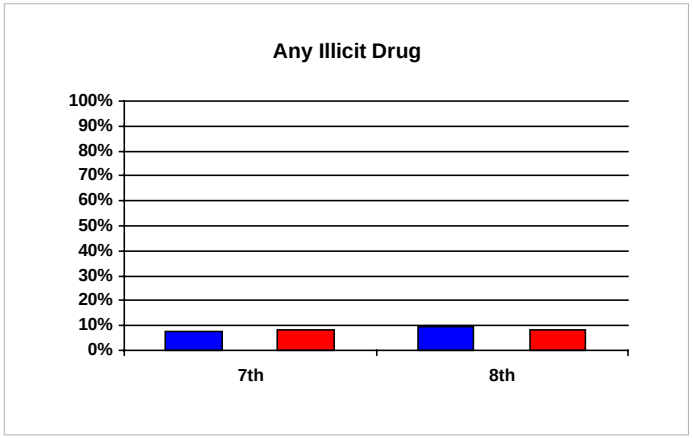
	PLS			CTC Matched Comparison*			New Jersey (Non-PLS)		
	7th	8th	Overall	7th	8th	Overall	7th	8th	Overall
Any Illicit Drug, Lifetime	16%	18%	17%	--	--	--	16%	18%	17%
Any Illicit Drug, 12 Months	13%	15%	14%	--	--	--	13%	14%	14%
Any Illicit Drug, 30 days	7%	9%	8%	--	--	--	8%	8%	8%
Hallucinogens, Lifetime	2%	3%	2%	3%	6%	5%	2%	3%	2%
Hallucinogens, 12 Months	1%	2%	2%	--	--	--	1%	2%	2%
Hallucinogens, 30 Days	1%	1%	1%	2%	3%	2%	1%	1%	1%
Cocaine, Lifetime	2%	2%	2%	4%	6%	5%	2%	3%	2%
Cocaine, 12 Months	2%	1%	2%	--	--	--	1%	2%	2%
Cocaine, 30 Days	1%	1%	1%	1%	3%	2%	1%	1%	1%
Heroin, Lifetime	1%	1%	1%	--	--	--	1%	2%	1%
Heroin, 12 Months	1%	1%	1%	--	--	--	1%	1%	1%
Heroin, 30 Days	0%	1%	1%	--	--	--	--	1%	1%
Other Illicit Drugs, Lifetime	9%	11%	10%	--	--	--	9%	11%	10%
Other Illicit Drugs, 12 Months	6%	8%	7%	--	--	--	6%	8%	7%
Other Illicit Drugs, 30 Days	4%	5%	4%	--	--	--	4%	6%	5%

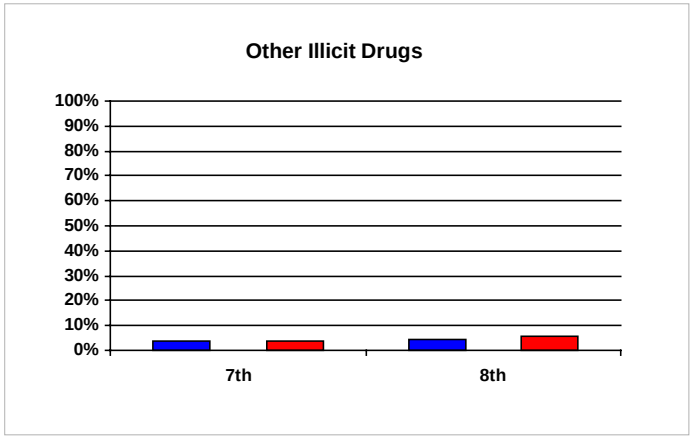
-- No comparison data available.

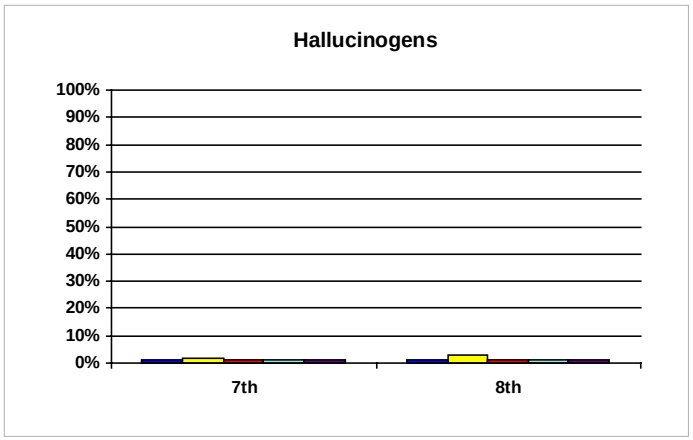
* Data matched to New Jersey on age, sex, and ethnicity.

Graph 10b. The prevalence of 30-day use of any illicit drug, and the top three most commonly used illicit drugs.









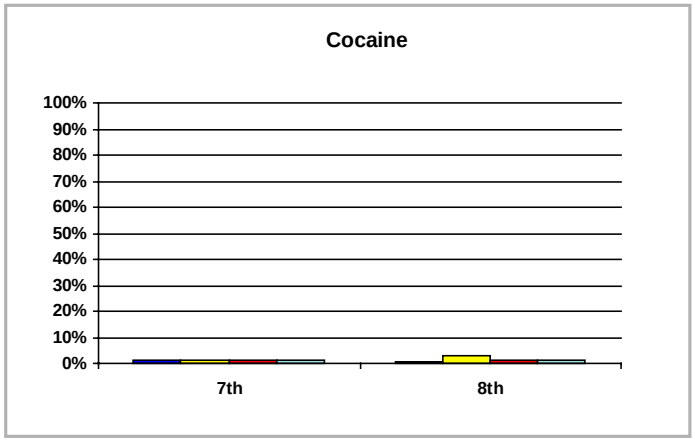


Table 15. The prevalence of delinquent behavior.

	PLS			CTC Matched Comparison*			New Jersey (Non-PLS)		
	7th	8th	Overal	7th	8th	Overall	7th	8th	Overall
Arrested	7%	9%	8%	8%	12%	10%	6%	8%	7%
Attacked Someone with Intention of Hurting	20%	19%	20%	17%	23%	20%	16%	17%	17%
Carried a Handgun in Neighborhood	3%	3%	3%	7%	11%	9%	2%	3%	3%
Drunk or High at School	7%	10%	8%	9%	17%	13%	6%	10%	8%
Has Taken Gun to School	1%	1%	1%	3%	5%	4%	1%	1%	1%
Sold Illegal Drugs	3%	5%	4%	5%	9%	7%	2%	5%	3%
Suspended From School	23%	24%	23%	15%	21%	18%	13%	15%	14%
Vehicle Theft	3%	4%	4%	5%	7%	6%	2%	3%	3%

-- No comparison data available.

* Data matched to PLS on age, sex and ethnicity.

Graph 11. The prevalence of delinquent behaviors in the past year.

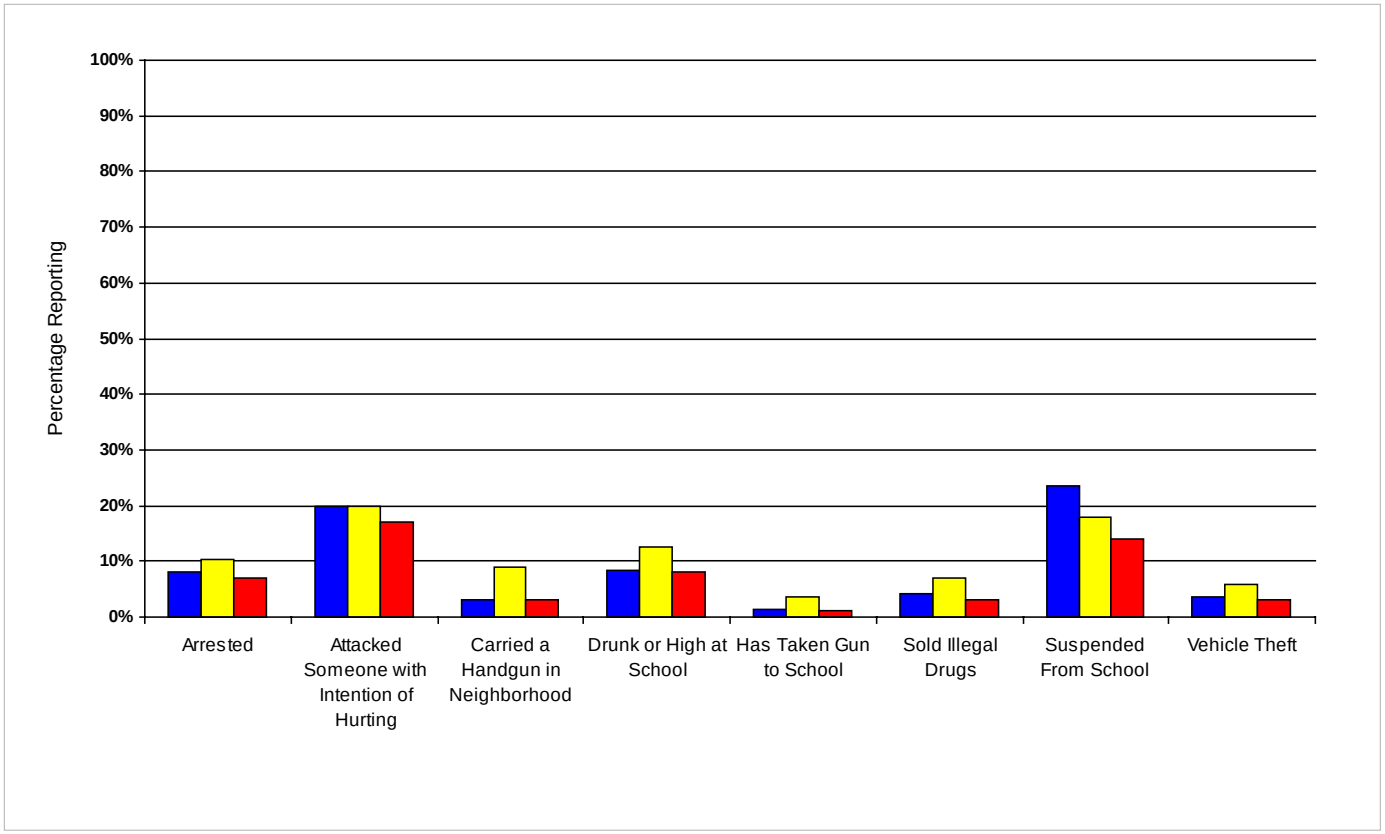


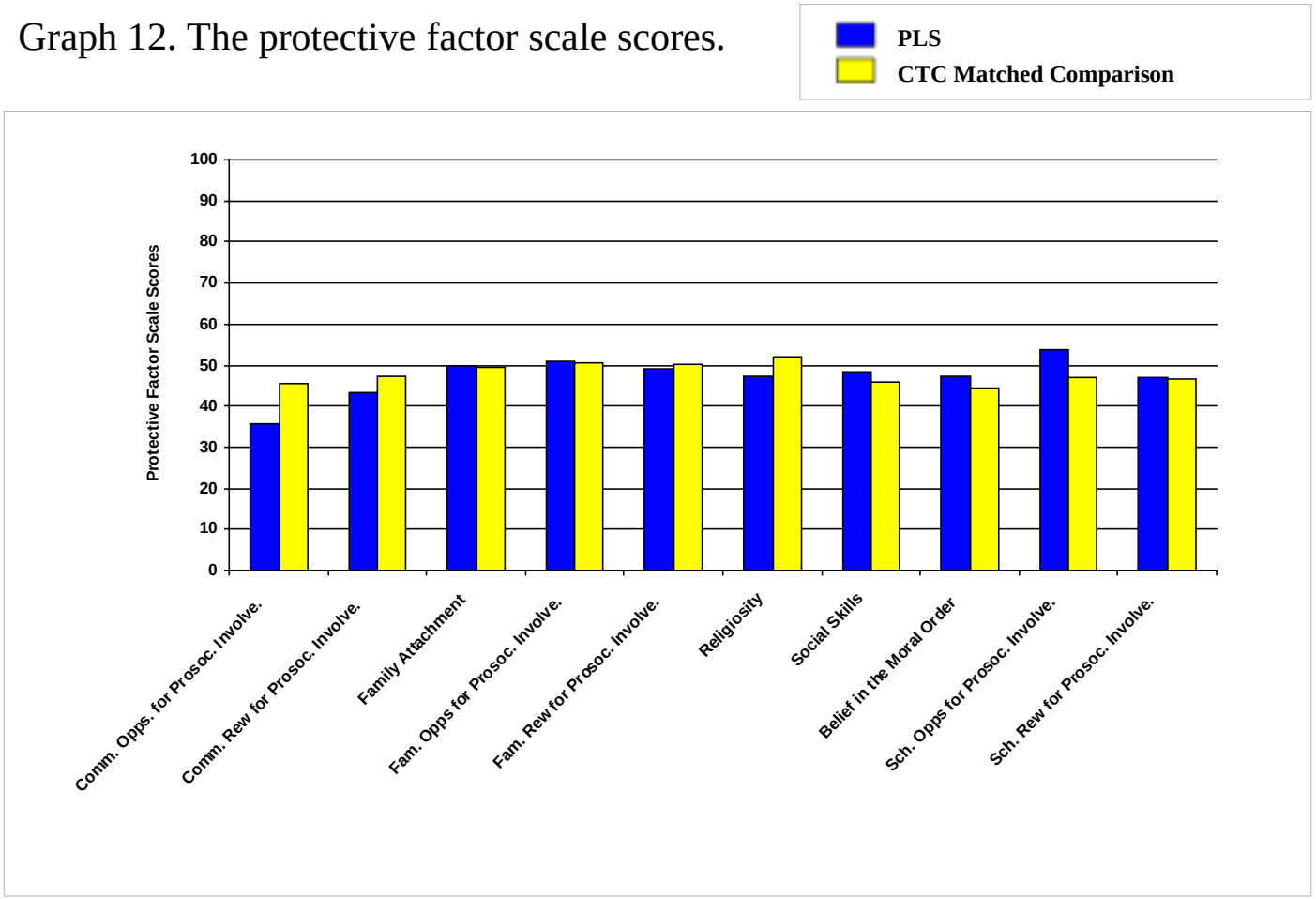
Table 16. Risk and Protective Factor Scale Scores.

	PLS	CTC Matched Comparison Scores
Protective Factor Scores		
Community Domain		
Community Opportunities for Prosocial Involvement	36	45
Community Rewards for Prosocial Involvement	43	47
Family Domain		
Family Attachment	50	49
Family Opportunities for Positive Involvement	51	50
Family Rewards for Positive Involvement	49	50
School Domain		
School Opportunities for Prosocial Involvement	54	47
School Rewards for Prosocial Involvement	47	47
Individual-Peer Domain		
Religiosity	47	52
Social Skills	48	46
Belief in the Moral Order	47	44
Total Average Protection	***47***	***48***
Behavior Outcomes		
Behavioral Outcomes		
Current ATOD Use	45	50
Current Antisocial Behavior	54	54
Gang Involvement	51	55

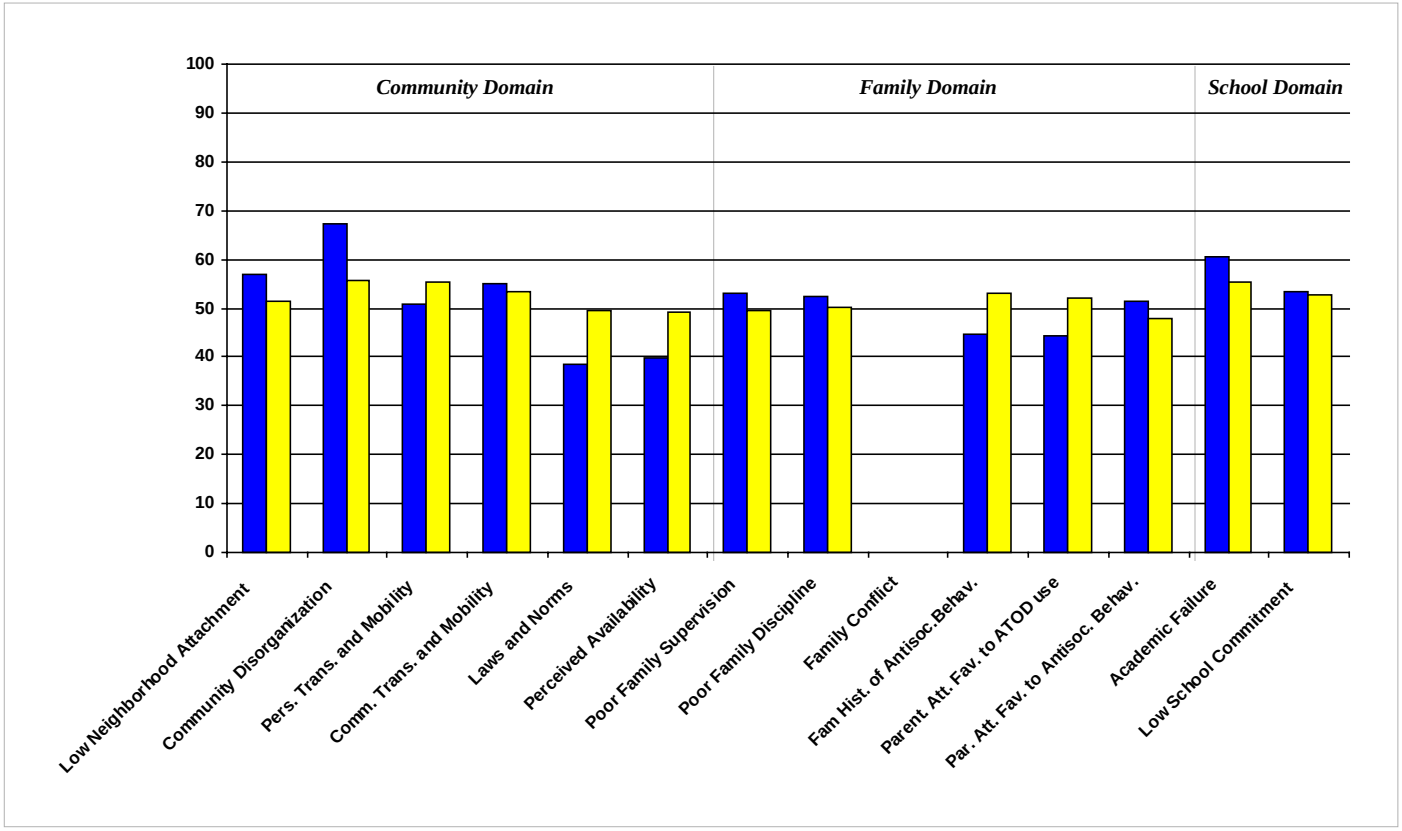
Table 16. Risk and Protective Factor Scale Scores (cont.)

	PLS	CTC Matched Comparison Scores
Risk Factor Scores		
Community Domain		
Low Neighborhood Attachment	57	52
Community Disorganization	67	56
Personal Transitions and Mobility	51	55
Community Transitions and Mobility	55	53
Laws and Norms	38	49
Perceived Availability	40	49
Family Domain		
Poor Family Supervision	53	49
Poor Family Discipline	53	50
Family Conflict		
Family History of Antisocial Behavior	45	53
Parental Attitudes Favorable to ATOD use	44	52
Parental Attitudes Favorable to Antisocial Behavior	52	48
School Domain		
Academic Failure	60	55
Low School Commitment	53	53
Individual-Peer Domain		
Rebelliousness	47	54
Friends' Delinquent Behavior	61	56
Friends' Use of Drugs	46	50
Peer rewards for Antisocial Behavior	44	51
Favorable Attitudes Towards Antisocial Behavior	44	54
Favorable Attitudes Towards ATOD Use	44	49
Perceived Risks Drug Use	45	49
Early Initiation	51	56
Sensation Seeking	48	50
Total Average Risk	***50***	***50***

Graph 12. The protective factor scale scores.

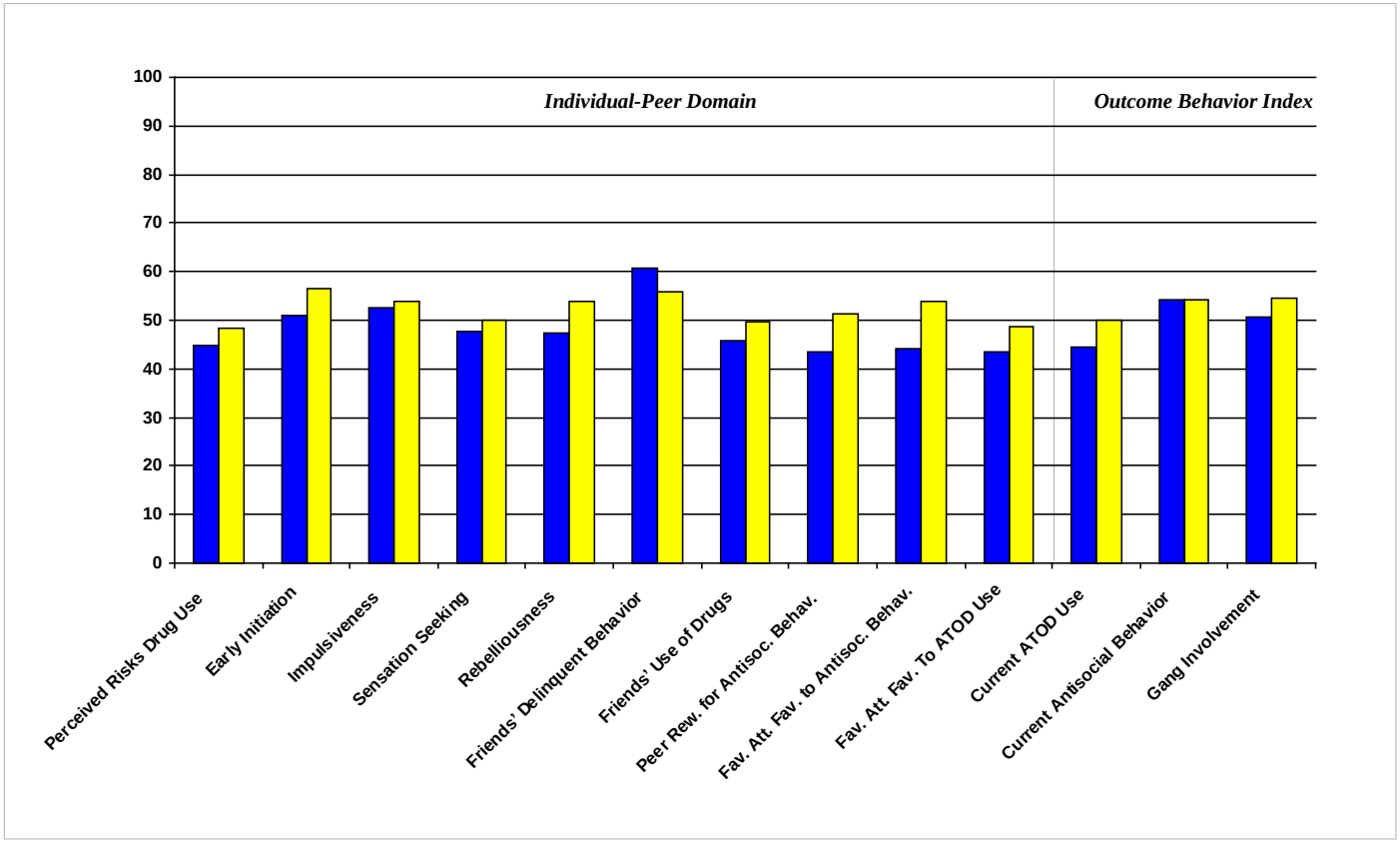


Graph 13a. Community, family, and school domain risk factor scale scores.



**Family Conflict scale is currently under revision.*

Graph 13b. Individual-peer domain risk factor scale scores and outcome behavior indexes.



Appendix A: Technical Report

All analyses were conducted using SPSS for Windows version 9.0. Risk and protective factor scale development is summarized in Pollard, Hawkins, Catalano, and Arthur (1998), Pollard and Lofquist (1998) and Pollard, Hawkins and Arthur (1999). Briefly, scales were developed using an extensive testing procedure. Item-scale placement was based on reliability analysis, factor analysis and patterns of corrected item-total correlations. Items that were not found to be reliable and/or valid were removed from the item pool. Once a maximally reliable and valid item pool was selected, the survey form was constructed. Scale reliability and validity are constantly undergoing testing to assure stability over time and across administrations.

Sampling was based on the probability proportionate to size (PPS) method. PPS is an efficient method for sampling a diverse population with widely varied cluster sizes, such as schools. In a simple random sample of students, every student would have an equal chance of being selected. This sort of procedure is, however, not logistically feasible. Using a PPS method, schools are the unit of selection in the cluster sample. In a simple random sample of schools, most of the schools selected would be small, since there are many more small schools than large ones. However, most students are in large schools. If schools were selected at random, students in large schools would have less of a chance of being selected than students in small schools. The PPS method attempts to correct this inequality.

All public and private middle schools were considered the target population. Schools were selected for recruitment randomly using PPS to determine selection probability. One Peer Leadership school and 4 additional schools (2 from each school enrollment group) were selected in each of New Jersey's 21 counties. All 7th and 8th grade students at a selected school were asked to participate. This selection procedure took school participation into account; it was believed that at least 2 of the 4 selected schools would participate.

For the 1999 New Jersey Communities that Care® Survey, there was a sampling pool of 101 schools. Each school was contacted by mail and telephone and asked to participate. Slightly more than 50% of those schools agreed to participate (n=54) and were provided survey forms. Of the schools that agreed to participate, 76% returned completed surveys (n=41). Thus, 40.6% (41/101) of the schools selected into the sampling pool returned surveys.

No schools participated in four counties: Burlington, Hunterdon, Union and Warren. Two additional counties did not achieve a sample large enough to ensure county-wide representation—Atlantic and Bergen counties will not be included in the statewide sample. Finally, while 3 schools participated from Mercer county, two of them were private. Therefore, countywide generalization would not be appropriate.

It follows that the statewide report includes data from 14 counties. As a consequence, we believe that the statewide report is representative of these 14 counties—not the entire middle school population in New Jersey. However, these counties constitute 72.7% of the total statewide enrollment of 7th and 8th grade students. Technical Appendix Table 1 shows the sample

characteristics for the survey effort. Note that four counties did not participate, and only one school was surveyed in three additional counties.

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 1997 enrollment as a baseline. The county weight was derived as the county enrollment as a proportion of the total state enrollment divided by the percentage of students surveyed in the county:

$$County\ Weight = \frac{\frac{County\ Enrollment}{State\ Enrollment}}{\frac{County\ Surveyed}{County\ Enrollment}}$$

For example, the 679 students that were surveyed in Sussex County were given a .38 weight. This weight was determined because the percentage of students surveyed from Sussex County was proportionally larger than the percentage of students enrolled in Sussex County, compared to New Jersey's total student enrollment. Thus, the dataset used to generate the statewide report were based upon data weighted such that county estimates were represented according to population. Technical Appendix Table 1 also shows the distribution of surveyed students which was used to generate the weights.

Technical Appendix Table 1. Survey sample characteristics.

County	Schools Surveyed	Students Surveyed	7th/8th Gr. County Enrollment [c]	% of County Enrollment Surveyed	County Enrollment as % of State Enrollment	Surveyed as % of State Enrollment	CI 95%	CI95%[d]
Atlantic [b]	1	36	6,502	0.55%	3.62%	.38%	±16.30%	±20.54%
Bergen [b]	1	49	19,266	0.25%	10.71%	.52%	±14.00%	±17.64%
Burlington [a]	--	--	--	--	--	--	--	--
Camden	2	156	14,150	1.10%	9.87%	1.66%	±7.80%	±9.83%
Cape May	2	673	2,420	27.81%	1.69%	7.17%	±3.20%	±4.03%
Cumberland	2	384	3,554	10.80%	2.48%	4.09%	±4.70%	±5.92%
Essex	3	702	18,962	3.70%	13.23%	7.48%	±3.60%	±4.50%
Gloucester	3	759	6,874	11.04%	4.80%	8.09%	±3.40%	±4.28%
Hudson	4	763	12,125	6.29%	8.46%	8.13%	±3.40%	±4.28%
Hunterdon [a]	--	--	--	--	--	--	--	--
Mercer [b]	3	335	8,287	4.04%	5.78%	3.57%	±5.20%	±6.55%
Middlesex	1	897	16,351	5.49%	11.41%	9.56%	±3.20%	±4.03%
Monmouth	2	677	15,447	4.38%	10.78%	7.21%	±3.70%	±4.66%
Morris	4	613	10,724	5.72%	7.48%	6.53%	±3.80%	±4.79%
Ocean	4	1,767	11,315	15.62%	7.89%	18.82%	±2.10%	±2.65%
Passaic	2	174	11,383	1.53%	7.94%	1.85%	±7.40%	±9.32%
Salem	2	450	1,741	25.85%	1.21%	4.79%	±4.00%	±5.04%
Somerset	3	273	6,161	4.43%	4.30%	2.91%	±5.80%	±7.31%
Sussex	2	679	3,848	17.65%	2.68%	7.23%	±3.40%	±4.28%
Union [a]	--	--	--	--	--	--	--	--
Warren [a]	--	--	--	--	--	--	--	--
Sample	36	8,967	135,055	6.63%	--	6.55%	±1.0%	±1.26%
Total	41	9,387	169,110	5.55%	--	6.55%	±1.0%	±1.26%

Notes: [a] Counties excluded from statewide estimates due to lack of participation; [b] Counties excluded from statewide estimates due to lack of
random sample; [c] Based on Fall 1997 enrollments; [d] Adjusted for cluster effects

Appendix B: Risk and Protective Factors, and Their Associated CTC Youth Survey Scales

Community Domain Protective Factors	**Protective Factor** **Community Opportunities for Prosocial Involvement** **Community Rewards for Prosocial Involvement**	Associated Scales Community Opportunities for Prosocial Involvement Community Rewards for Prosocial Involvement
Community Domain Risk Factors	**Risk Factor** **Low Neighborhood Attachment and Community Disorganization** **Transitions & Mobility** **Laws and Norms Favorable to Drug Use, Firearms, and Crime** **Availability of Drugs and Firearms** **Medial Portrayal of Violence** **Extreme Economic Deprivation**	Associated Scales Low Neighborhood Attachment Community Disorganization Personal Transitions & Mobility Community Transitions & Mobility Laws and Norms Perceived Availability No Scale No Scale
Family Domain Protective Factors	**Protective Factor** **Family Attachment** Family Opportunities for Positive **Involvement** **Family Rewards for Positive Involvement**	Associated Scales Family Attachment Family Opportunities for Positive Involvement Family Rewards for Positive Involvement
Family Domain Risk Factors	**Risk Factor** **Family Management Problems** **Family Conflict** **Family Involvement in the Problem Behavior** **Favorable Parental Attitudes Towards the Problem Behavior**	Associated Scales Poor Family Supervision Poor Family Discipline No Scale Family History of Antisocial Behavior Parental Attitudes Favorable to ATOD Use Parental Attitudes Favorable to Antisocial Behavior

Appendix B (Cont.): Risk and Protective Factors, and Their Associated CTC Youth Survey Scales

School Domain Protective Factors	**Protective Factor** **School Opportunities for Prosocial Involvement** **School Rewards for Prosocial Involvement**	Associated Scales School Opportunities for Prosocial Involvement School Rewards for Prosocial Involvement
School Domain Risk Factors	**Risk Factor** **Academic Failure Beginning in Late Elementary School** **Lack of Commitment to School** **Early and Persistent Antisocial Behavior**	Associated Scales Academic Failure Low School Commitment Early Initiation of ATOD Use and Delinquency
Individual-Peer Protective Factors	**Protective Factor** **Religiosity** **Social Skills** **Belief in the Moral Order**	Associated Scales Religiosity Social Skills Belief in the Moral Order
Individual-Peer Risk Factors	**Risk Factor** **Rebelliousness** **Friends Who Engage in the Problem Behavior** **Favorable Attitudes Toward the Problem Behavior** **Early Initiation of the Problem Behavior** **Constitutional Factors**	Associated Scales Rebelliousness Friends' Delinquent Behavior Friends' Use of Drugs Peer Rewards for Antisocial Behavior Favorable Attitudes Towards Antisocial Behavior Favorable Attitudes Towards ATOD Use Perceived Risks of Drug Use Early Initiation of ATOD Use and Delinquency Impulsiveness Sensation Seeking Depression (No Scale)

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