

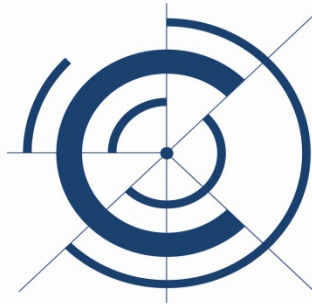
# Comprehensive Substance Abuse Prevention Program Evaluation

**THE IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION**

**Comprehensive  
Substance Abuse Prevention  
Program Evaluation – Annual Report  
7/1/2013 – 6/30/2014**

**With Funds Provided By:**

**Iowa Department of Public Health,  
Division of Behavioral Health**



**THE IOWA  
CONSORTIUM**  
FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

# **Comprehensive Substance Abuse Prevention Program Evaluation – Annual Report**

**Kristin White, MA  
Evaluation Coordinator**

**Julie Palmer, BA  
Associate Director**

**Stephan Arndt, PhD  
Director**

**Suggested Citation:**

White, K., Palmer, J., & Arndt, S. (2014). Comprehensive Substance Abuse Prevention Program Evaluation Report. (Iowa Department of Public Health Contract #5884YM50). The University of Iowa. Iowa City, IA: Iowa Consortium for Substance Abuse Research and Evaluation.  
<http://iconsortium.subst-abuse.uiowa.edu>

## EXECUTIVE SUMMARY

The Comprehensive Substance Abuse Prevention Project provides primary alcohol, tobacco, and other drug (ATOD) prevention services to all counties in Iowa. Eighteen providers covering twenty-three service areas implemented a variety of evidence-based prevention programming for the project year that ran from July 1, 2013 to June 30, 2014. Agencies submitted 5,676 total matched pre-test and post-test surveys for analysis.

Participants included in this evaluation ranged in age from 9 to 19; the median age (at post-test) was 12. Nearly three-quarters (71.9%) of the participants are in middle school (6<sup>th</sup> through 8<sup>th</sup> grade students). Males comprise 51.2% of respondents, and 11.9% of all respondents are Hispanic or Latino. Attrition analyses indicated that African American and multi-racial participants, and those ages 13, 14, and 19 were more likely to drop out or not complete a post-test. There were no differences in attrition based on students' attitudes toward or perception of risk of harm from substance use.

The evaluation of the Comprehensive Prevention project answers the following questions:

- *Has alcohol/tobacco/marijuana usage changed in the target population?*

The following table presents data on the percentage of middle and high school youth reporting past 30-day use of alcohol, binge drinking, cigarettes, and marijuana at the pre-test, and the percentage change and direction of change at post-test. These data are for participants in all programs combined, excluding Diversion programs. Iowa Youth Survey data also are provided.

Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: Comprehensive Prevention Project Participants										
Group	N	Median Age	Alcohol		Binge Drinking		Cigarettes		Marijuana	
			Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	46,133 <sup>2</sup>	14 <sup>3</sup>	–	<b>+4.80</b>	–	<b>+3.60</b>	–	<b>+2.00</b>	–	<b>+2.20</b>
Comprehensive Prevention	4,293	13	7.55	<b>+0.12</b>	1.74	<b>-0.33</b>	1.70	<b>+0.31</b>	1.38	<b>+0.05</b>

<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating Iowa students in grades 6 and 11. Data were from the 2012 Iowa Youth Survey, State of Iowa report.

<sup>2</sup> The total number of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 24,170, and the total number of 11<sup>th</sup> graders was 21,963.

<sup>3</sup> The median age of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 11.5 years, and the median age of 11<sup>th</sup> graders was 16.5 years.

There was no statistical evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use in the combined middle school and high school Comprehensive Prevention participant group (excluding Diversion program participants) or for the individual programs conducted (statistical tests yielded p values greater than 0.05). However, this also



means that use of those substances showed no evidence of increasing as might be expected due to maturation.

There were statistically significant decreases in the use of alcohol, binge drinking, and marijuana for Diversion program participants (youth who have already experienced legal or other consequences from their substance use).

- *Has the percentage of the target population who indicate desirable attitudes (i.e., that it is wrong to use substances) at baseline (pre-test) maintained or increased after the intervention (post-test)?*

Attitude responses are coded on a Likert scale from “not wrong at all” to “very wrong.” Maintaining a response from pre-test to post-test that use is “wrong” or “very wrong,” or moving up the scale towards “very wrong” from any point on the scale is considered a positive outcome. Elementary school programs showed positive outcomes of 90% or more for attitude toward substance use. Most middle and high school programs showed positive outcomes for 81% or more of participants; Project Towards No Drug Abuse showed lower positive outcome percentages for alcohol and cigarettes. All Stars tended to be the highest performer. For Diversion programs, more than 77% of participants showed positive outcomes for attitudes regarding alcohol use, more than 84% showed positive outcomes regarding attitude toward cigarette use, and nearly 76% showed positive outcomes regarding attitude toward marijuana use. It is noteworthy that 38% of Diversion participants moved up the scale (further toward “very wrong”) for alcohol use and 32% moved up the scale for cigarette use.

- *Has perception of risk of harm from alcohol/tobacco/marijuana use maintained a positive response or increased from pre-test to post-test?*

Perception of risk responses are coded on a Likert scale from “no risk” to “great risk.” Maintaining a response from pre-test to post-test that use poses “moderate risk” or “great risk,” or moving up the scale towards “great risk” from any point on the scale is considered a positive outcome. Outcome percentages were more variable among programs for perception of risk of harm from use than for attitude toward use. Most elementary programs had positive outcomes of 75% or more for alcohol and cigarettes, although Project Towards No Tobacco Use had 63% positive outcomes for perceived risk of harm from alcohol use. Outcome percentages for perceived risk of marijuana use range from just over 51% to just fewer than 66% for elementary programs, with Project Towards No Tobacco Use again being the lowest performer. All middle and high school programs had higher positive outcome percentages, most with 81% or more for alcohol, cigarettes, and marijuana. All Stars tended to be the highest performer. For Diversion programs, just over 83% of participants showed positive outcomes for perceived risk of harm from substance use. It is noteworthy that 35% of Diversion participants moved up the scale (further toward “great risk”) for perceived risk of harm from alcohol use and 33% moved up the scale for perceived risk of harm from marijuana use.

The evaluators recommend prevention agencies increase efforts to engage and retain African American and multi-racial youth and participants ages 13 and 14.



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## BACKGROUND

The Comprehensive Substance Abuse Prevention Project provides primary alcohol, tobacco, and other drug (ATOD) prevention services to all counties in Iowa. The project is funded through a Substance Abuse Prevention and Treatment (SAPT) Block Grant from the federal Substance Abuse and Mental Health Services Administration (SAMHSA). The Iowa Department of Public Health, Division of Behavioral Health (IDPH) administers the prevention portion of the Block Grant funds through a competitive process to provide funding for each county in the state. Eighteen providers covering twenty-three service areas were awarded contracts to implement a variety of evidence-based prevention programming for the funding cycle that runs from July 1, 2010 to June 30, 2014.

The Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) was awarded a contract with IDPH to evaluate the project and to provide training and technical assistance to the providers on data collection and data entry. The evaluation of the Comprehensive Substance Abuse Prevention Project (Comprehensive Project) discussed in this report covers the fourth year of the funding period mentioned above and includes only recurring educational programs for youth. Other services provided under the Comprehensive Prevention Project were monitored outside of this evaluation. In addition, one contractor implements prevention programming with early elementary students who are below the appropriate age for surveying; therefore data for that contractor is not included in this report.

### Methodology

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The evaluation involves a matched pre-post design whereby a survey is administered to the target population at the beginning and at the conclusion of the prevention program. The survey is also administered at the end of each year for programs spanning multiple years. Post-test survey data from the previous program year is typically used as a baseline for reporting current-year outcomes for multi-year programs. Survey instruments may be found in Appendix A.

Agencies submitted 6,219 pre-tests, 5,903 first-year post-tests, 1,134 second-year post-tests, and 49 third-year post-tests during State Fiscal Year 2014 (July 1, 2013 – June 30, 2014). This yielded 5,676 total matched surveys; 4,709 of these were for participants in single-year programs and those in the first year of multi-year programs; 918 were from participants in the second year of multi-year programs, and 49 were from participants in the third year of multi-year programs. Matched data include participants completing the Comprehensive and Younger Youth survey instruments.

The matched data sets are used to answer the following evaluation questions:

- Has alcohol/tobacco/marijuana use changed in the target population?
- Has the percentage of the target population who indicate at baseline (pre-test) that substance use by someone their age is wrong or very wrong remained the same (maintained) or increased after the intervention (post-test)?
- Has perceived risk of harm from alcohol/tobacco/marijuana use maintained a positive response (belief that using poses a moderate or great risk of harm) or increased from pre-test to post-test?

## OUTCOME DATA

### Participant Profile

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Demographic data provided here include participants in all programs who completed the Comprehensive or Younger Youth survey instrument. There are some instances where individual responses on demographic data varied from pre-test to post-test. Some differences are naturally occurring, such as participants' age or grade increasing by one year. In those cases, post-test responses were used, as those data most closely represent the matched group included in this report. In addition, there were numerous mismatches in individual participant responses from pre-test to post-test for gender, race, and ethnicity on both surveys. Upon investigation, agency and Consortium staff discovered that the majority of these discrepancies were due to participants giving different responses and not due to data entry error. Therefore, evaluation staff created a standard rule for addressing discrepancies in demographic data, which was to use the responses on the post-tests.

The median age (at post-test) of participants included in this report is 12. Nearly three-quarters (71.9%) of the participants are in middle school (6<sup>th</sup> through 8<sup>th</sup> grade students). Males comprise 51.2% of respondents, and 11.9% of all respondents are Hispanic or Latino. Participant racial groups are delineated below:

- 78.1% White
- 3.9% Black/African American
- 2.7% Asian
- 1.0% American Indian/Alaska Native
- 0.2% Native Hawaiian/Other Pacific Islander
- 4.7% Some Other Race
- 9.4% More than one race

A list of the Institute of Medicine (IOM) population categories served by this project may be found in Appendix B.

### Attrition Analysis

The Evaluators conducted an attrition analysis comparing students who completed a pre- and a post-test survey to those who completed only a pre-test survey this project year. The analysis was conducted on data for students in single-year programs and the first year of multi-year programs. Agencies differ in the number of curriculum years implemented of any given program, and students do not complete pre-tests in subsequent years of multi-year programs. Therefore, determining attrition from year to year can be difficult. Nearly twelve percent (11.8%) of students who completed a single-year or first-year program pre-test did not complete a post-test survey and are considered attrition cases. There were no differences in attrition based on students' attitudes toward or perception of risk of harm from substance use. There were clear differences on demographic variables between students who dropped out of programs or failed to complete a post-test and those who completed a post-test. There were no differences based on ethnicity; however, Blacks and students indicating more than one race were significantly more likely to attrite than those of other races (CMH,  $p < 0.0054$ ). There were significant differences in the grades (CMH,  $p < 0.0053$ ) and ages of students dropping out: Eighth and eleventh graders were most likely to attrite; nearly one quarter (23.9%) of 8<sup>th</sup> grade participants did not complete a post-test. Participants aged 13, 14 and 19 were more likely to attrite than participants of other ages (CMH,  $p = 0.0002$ ). Therefore, the participants represented by the





outcome data presented in this report differ in some ways from those who initiated the program. This selective attrition should be taken into consideration when interpreting outcomes.

The outcome evaluation assessed past 30-day substance use, attitudes toward substance use, and perceived risk of harm from substance use for alcohol, cigarettes, and marijuana.

## **Past 30-Day Use**

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Data on past 30-day use are provided for Comprehensive Prevention project participants who completed the Comprehensive Prevention Survey. Data are provided for programs where 50 or more participants completed both a pre-test and a post-test. The Comprehensive Prevention Younger Youth survey does not ask about past 30-day use, therefore participants who completed that survey are not included in the past 30-day use data. Attitude and perceived risk outcomes for Younger Youth respondents are provided beginning on page 10. In addition, data for Diversion program participants are provided separately because the population served by Diversion programs is different from that of the other programs. Diversion program outcome data begin on page 29. Tables 1 through 3 and Figures 1 through 3 on the following pages present past 30-day use data for middle school and high school youth in non-Diversion programs.

The Iowa Youth Survey (IYS) data are provided as a reference for interpreting the outcome data in this report. The Iowa Youth Survey is a biennial assessment of Iowa's school-age (grades 6, 8, and 11) students' attitudes toward substance use and actual use of substances. The IYS data reflect changes due to maturation of the youth through the different grade levels. The 2012 IYS data provided here represent an estimate of the change one might see among youth in the general population over the course of one year. Thus, this shows the estimated annual change one might expect in Iowa's general youth population versus the outcomes of youth who complete specific prevention programming under the Comprehensive Prevention project. (Note: Youth who received Comprehensive programming may also have completed the IYS). The average yearly change was calculated by dividing the difference between grades by the number of years between grades. This was done using 6<sup>th</sup> and 11<sup>th</sup> grade IYS data to provide a reference for Comprehensive Prevention Project outcomes in Table 1; using 6<sup>th</sup> and 8<sup>th</sup> grade IYS data for participants in elementary and middle school programs; and using 8<sup>th</sup> and 11<sup>th</sup> grade IYS data for participants in high school programs. A single average yearly change figure is given in the tables to simplify interpretation. True yearly change rates, however, would increase each successive year (i.e., past 30-day use between 6<sup>th</sup> and 7<sup>th</sup> grade may increase less than 4.5%, but may increase more than 4.5% between 7<sup>th</sup> and 8<sup>th</sup> grade). While the time span between pre-test and post-test for some prevention programs presented here is less than one year, the IYS average yearly change serves as a general point of reference when examining the program outcomes rather than comparing to zero, or no change.



Table 1 presents data on the percentage of middle and high school youth reporting past 30-day use of alcohol, binge drinking (5 or more drinks in a row), cigarettes, and marijuana at the pre-test, and the percentage change and direction of change at post-test. Increases in the percentage of youth reporting use are indicated by a '+'; decreases in percentage of youth reporting use are indicated by a '-'. However, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test. These data are for participants in all programs combined who completed the Comprehensive Prevention Survey, excluding Diversion program participants. Iowa Youth Survey data also are provided.

**Table 1: Change in Past 30-Day Use: Comprehensive Prevention Survey Respondents**

Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: Comprehensive Prevention Survey Respondents										
Group	N	Median Age	Alcohol		Binge Drinking		Cigarettes		Marijuana	
			Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	46,133 <sup>2</sup>	14 <sup>3</sup>	-	<b>+4.80</b>	-	<b>+3.60</b>	-	<b>+2.00</b>	-	<b>+2.20</b>
Comprehensive Prevention	4,293	13	7.55	<b>+0.12</b>	1.74	<b>-0.33</b>	1.70	<b>+0.31</b>	1.38	<b>+0.05</b>

<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating Iowa students in grades 6 and 11. Data were from the 2012 Iowa Youth Survey, State of Iowa report.

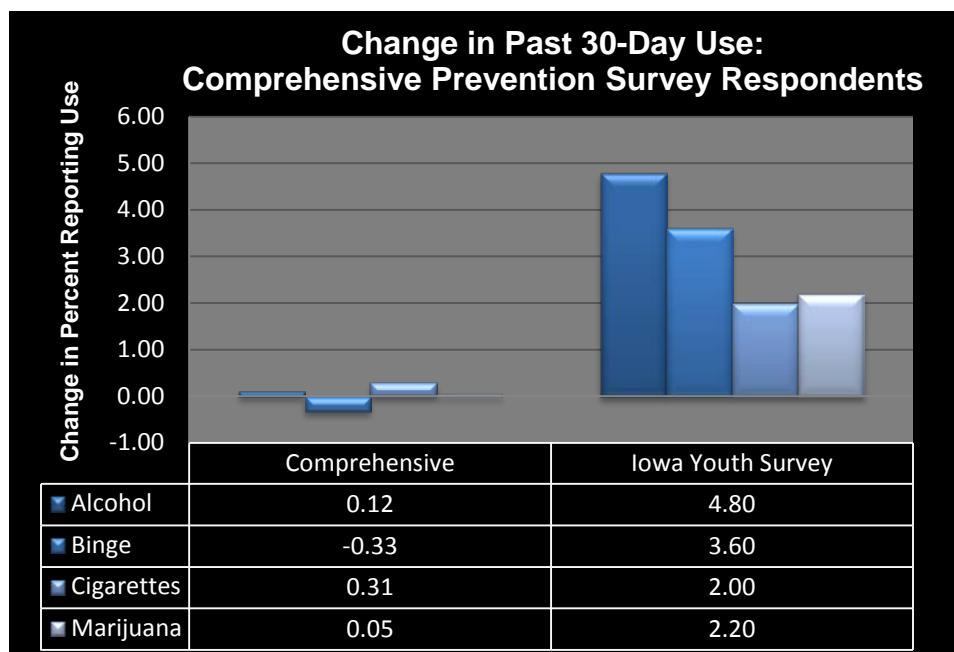
<sup>2</sup> The total number of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 24,170, and the total number of 11<sup>th</sup> graders was 21,963.

<sup>3</sup> The median age of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 11.5 years, and the median age of 11<sup>th</sup> graders was 16.5 years.

There was no evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use in the combined middle school and high school Comprehensive Prevention participant group (McNemar statistical tests yielded *p* values greater than 0.05). However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation. Figure 1 on page 5 graphically displays the past 30-day use data provided in Table 1.



**Figure 1: Change in Past 30-Day Use: Comprehensive Prevention Survey Respondents**



The remaining tables and graphs in this report provide outcome data by specific prevention program within the Comprehensive Prevention Project. Programs are grouped according to whether the program is provided within one school year or grade (single-year programs), or spans more than one school year or grade (multi-year programs). The Consortium and IDPH re-categorized two programs during State Project Year 2012: Brain Power and Too Good for Drugs. Those programs offer curricula for several grades, but each grade's curricula can be administered as a stand-alone program, and some Comprehensive contractors implement those programs in only one grade. Therefore, Brain Power and Too Good for Drugs are now treated as single-year rather than multi-year programs.

Tables 2 and 3 and Figures 2 and 3 on the following pages present program-specific data on the percentage of youth reporting past 30-day use of alcohol, binge drinking, tobacco, marijuana at the pre-test, and the percentage and direction of change at post-test. The change values presented in the tables do not necessarily indicate statistically significant differences from pre-test to post-test. Table 2 and Figure 2 present data for participants in single-year programs. Table 3 and Figure 3 present data for participants in multi-year programs.

**Table 2: Change in Past 30-Day Use: Comprehensive Prevention Survey Respondents in Single-Year Programs**

Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: Comprehensive Prevention Survey Respondents in Single-Year Programs										
Group	N	Median Age	Alcohol		Binge Drinking		Cigarettes		Marijuana	
			Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	46,133 <sup>2</sup>	14 <sup>3</sup>	–	<b>+4.80</b>	–	<b>+3.60</b>	–	<b>+2.00</b>	–	<b>+2.20</b>
Brain Power	78	12 <sup>4</sup>	6.49	<b>0</b>	2.60	<b>-1.30</b>	1.30	<b>0</b>	0	<b>0</b>
Prime for Life	101	15 <sup>5</sup>	10.00	<b>-1.00</b>	3.00	<b>+1.00</b>	6.00	<b>-3.00</b>	1.00	<b>0</b>
Project Towards No Drug Abuse	144	14 <sup>6</sup>	25.69	<b>-1.38</b>	10.42	<b>0</b>	8.33	<b>+3.48</b>	6.94	<b>-1.38</b>
Too Good for Drugs	645	12 <sup>7</sup>	11.74	<b>-1.88</b>	2.82	<b>-0.94</b>	1.25	<b>+0.78</b>	2.34	<b>+0.16</b>

<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating Iowa students in grades 6 and 11. Data were from the 2012 Iowa Youth Survey, State of Iowa report.

<sup>2</sup> The total number of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 24,170, and the total number of 11<sup>th</sup> graders was 21,963.

<sup>3</sup> The median age of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 11.5 years, and the median age of 11<sup>th</sup> graders was 16.5 years.

<sup>4</sup> Brain Power participants were in grades 6-7.

<sup>5</sup> Prime for Life (PFL) participants were in grades 8-12.

<sup>6</sup> Project Towards No Drug Abuse (TND) participants were in grades 7-12.

<sup>7</sup> Too Good for Drugs (TGFD) participants were in grades 5-12.

There was no evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for the single-year programs (McNemar statistical tests yielded p values greater than 0.05). However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation.

**Figure 2: Change in Past 30-Day Use: Comprehensive Prevention Survey Respondents in Single-Year Programs**

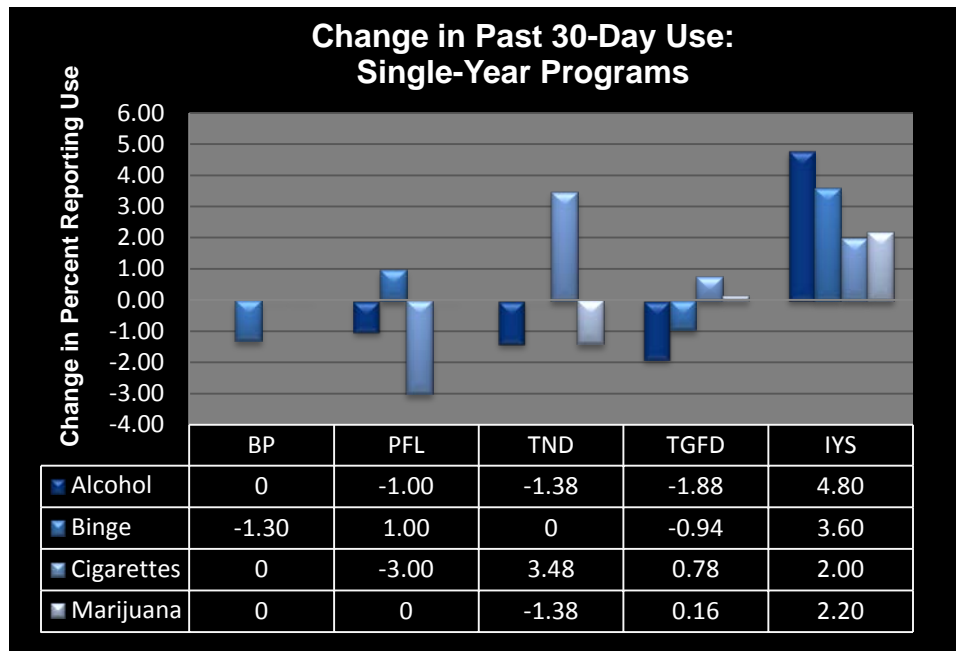


Table 3 on page 8 presents data on the percentage of youth reporting past 30-day use of alcohol, binge drinking, tobacco, and marijuana at the pre-test and the amount and direction of change at post-test for participants in multi-year programs. The change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test. There were not sufficient numbers of matched pre- and post-test surveys for reporting for the second year of All Stars or the third year of the LifeSkills Training program.

**Table 3: Change in Past 30-Day Use: Comprehensive Prevention Survey Respondents in Multi-Year Programs**

Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: Comprehensive Prevention Survey Respondents in Multi-Year Programs										
Group	N	Median Age	Alcohol		Binge Drinking		Cigarettes		Marijuana	
			Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	46,133 <sup>2</sup>	14 <sup>3</sup>	–	<b>+4.80</b>	–	<b>+3.60</b>	–	<b>+2.00</b>	–	<b>+2.20</b>
All Stars (AS) – Year 1	51	11 <sup>4</sup>	3.92	<b>0</b>	0	<b>0</b>	1.96	<b>-1.96</b>	1.96	<b>0</b>
LifeSkills Training (LST) - Year 1	1100	12 <sup>5</sup>	6.36	<b>+1.49</b>	1.31	<b>+0.18</b>	1.50	<b>+0.28</b>	1.49	<b>+0.28</b>
LifeSkills Training (LST) - Year 2	55	12 <sup>5</sup>	5.88	<b>-3.92</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>
Project ALERT (PA) – Year 1	1195	12 <sup>6</sup>	6.09	<b>+0.08</b>	0.84	<b>-0.08</b>	1.44	<b>-0.09</b>	0.59	<b>+0.17</b>
Project ALERT (PA) – Year 2	784	13 <sup>6</sup>	4.50	<b>+1.23</b>	0.95	<b>-0.68</b>	1.23	<b>+0.81</b>	0.82	<b>-0.28</b>

<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating Iowa students in grades 6 and 11. Data were from the 2012 Iowa Youth Survey, State of Iowa report.

<sup>2</sup> The total number of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 24,170, and the total number of 11<sup>th</sup> graders was 21,963.

<sup>3</sup> The median age of 6<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 11.5 years, and the median age of 11th graders was 16.5 years.

<sup>4</sup> All Stars Yr.1 participants ranged in age from 11-13 and were in grades 6-7.

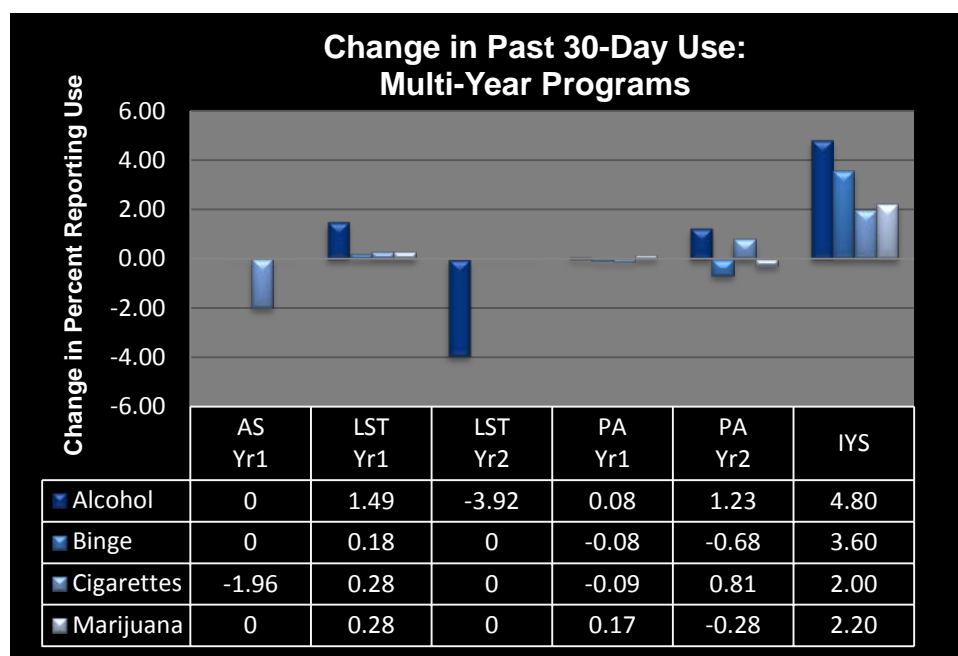
<sup>5</sup> LST Yr.1 participants ranged in age from 0 (per survey data entered into Database Builder) to19 and were in grades 5-12; Yr.2 participants ranged in age from 12-14 and were in grade 7.

<sup>6</sup> PA Yr.1 participants ranged in age from 1 (per survey data entered into Database Builder) to17 and were in grades 6-7; Yr.2 participants ranged in age from 12 -15 and were in grades 7-8.



There was no evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for the multi-year programs (McNemar statistical tests yielded  $p$  values greater than 0.05). However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation. Figure 3 displays graphically the data provided in Table 3.

**Figure 3: Change in Past 30-Day Use: Comprehensive Prevention Survey Respondents in Multi-Year Programs**



## Attitudes Toward Substance Use

Figures 4 through 12 on the following pages show change in individual attitudes toward substance use from the pre-test to the post-test, by program. Data for programs serving elementary school students are provided first, followed by data for programs serving middle- and high-school youth. Programs are grouped according to program duration (single-year and multi-year programs); however there were no data for elementary school level multi-year programs this year. The change values presented in the figures do not necessarily indicate statistically significant differences from pre-test to post-test. The number in parentheses after each program name in the figures is the number of respondents answering the question on both the pre-test and the post-test.

Attitude responses are coded on a Likert scale from “not wrong at all” to “very wrong.” Individual attitudes either:

- 1) improved, which means that attitudes moved up the scale towards “very wrong” from any point on the scale (e.g., respondent felt alcohol use was wrong at pre-test and very wrong at post-test);
- 2) maintained +, which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarette, or marijuana use (“wrong” or “very wrong”);

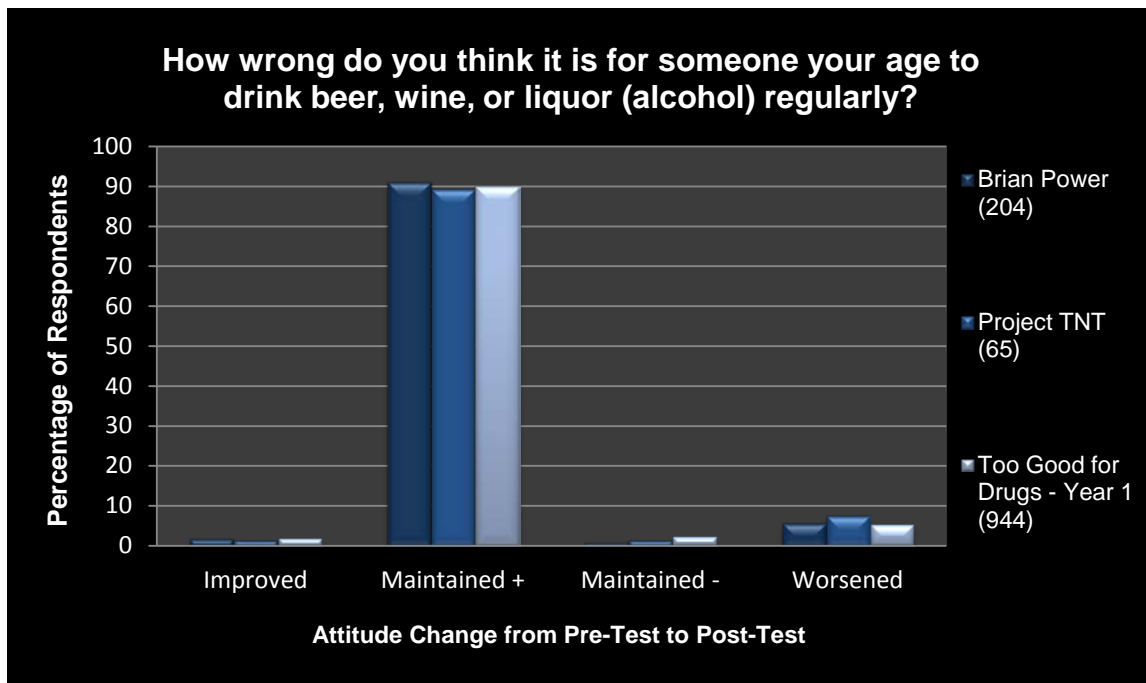
- 3) maintained -, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use (“a little wrong” or “not wrong at all”); or
- 4) worsened, meaning that attitudes moved down the scale away from “very wrong” from any point on the scale (e.g., respondent felt marijuana use was “wrong” at pre-test and “a little bit wrong” at post-test).

Maintaining a response from pre-test to post-test that use is “wrong” or “very wrong,” or moving up the scale towards “very wrong” from any point on the scale is considered a positive outcome.

### Attitudes Toward Alcohol Use

Figure 4 shows the direction of change in individual attitudes toward alcohol use from pre- to post-test for single-year programs that served elementary school youth. The elementary school youth group contains some 6<sup>th</sup> graders (7.9% of total), although all completed the Younger Youth (YY) survey. Agencies administered the YY survey to 6<sup>th</sup> graders who were in the second or third year of multi-year programs and had taken the YY survey in the previous grade(s). Thus, data would be consistent for those participants across program years. The change values presented in Figure 4 do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 4: Change in Attitudes Toward Alcohol Use by Program: Elementary School Youth in Single-Year Programs<sup>1</sup>**



<sup>1</sup> The median age of Brain Power participants was 11; participants ranged in age from 9 to 12 and were in the 4<sup>th</sup> and 5<sup>th</sup> grades. The median age of Project Towards No Tobacco Use (TNT) participants was 11; participants ranged in age from 10 to 12 and were in the 5<sup>th</sup> grade. The median age of Too Good for Drugs (TGFD) participants was 10; participants ranged in age from 9 to 13 and were in the 4<sup>th</sup> through 6<sup>th</sup> grades.



The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that alcohol use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) for attitudes toward alcohol use combined reflect good outcomes. Notably, the percentages of participants in the Improved and Maintained+ categories (Figure 4) are:

- Brain Power – 93.1%
- Project Towards No Tobacco Use – 90.8%
- Too Good for Drugs – 92.2%

Figure 5 shows the change in individual attitudes toward alcohol use from pre- to post-test for single-year programs that served middle and high school youth. These data are from the regular Comprehensive Prevention Survey. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 5: Change in Attitudes Toward Alcohol Use by Program: Middle and High School Youth in Single-Year Programs**

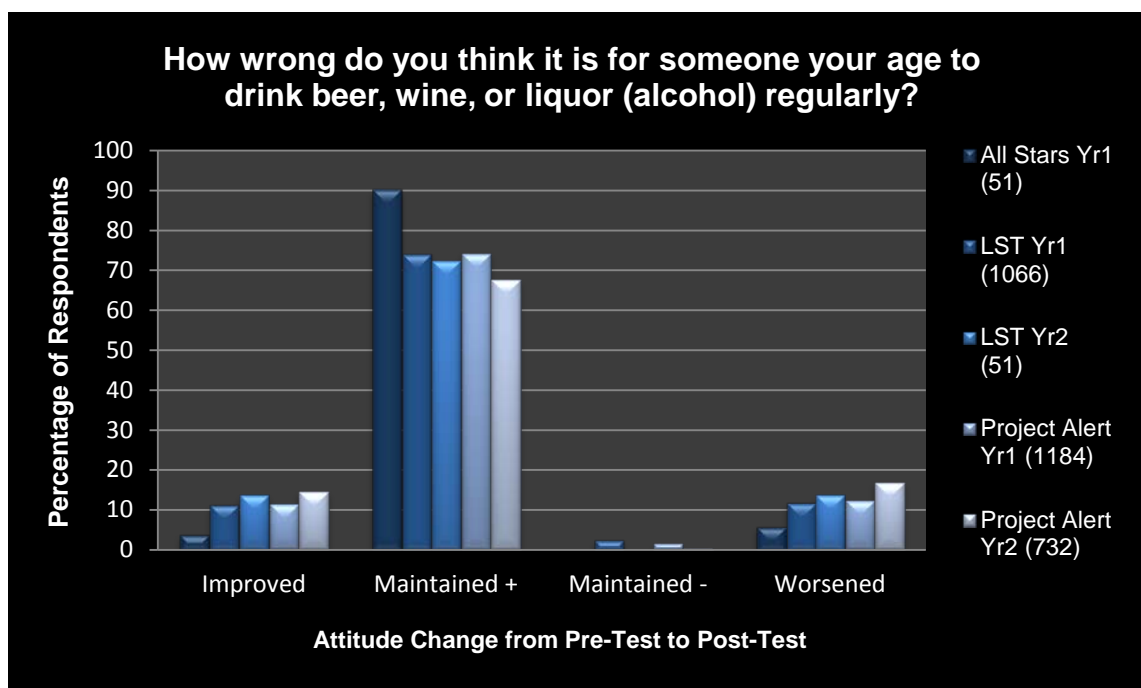


The percentages of middle and high school single-year program participants showing positive outcomes (maintaining a response that alcohol use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 5, the combined percentages of participants in the Improved and Maintained+ categories are:

- Brain Power – 81.6%
- Prime for Life – 73.7%
- Project Towards No Drug Abuse – 66.7%
- Too Good for Drugs – 82.7%

Figure 6 below shows the change in individual attitudes toward alcohol use from pre- to post-test for multi-year programs that served middle and high school youth. These data present individual years of multi-year programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 6: Change in Attitudes Toward Alcohol Use by Program: Middle and High School Youth in Multi-Year Programs**



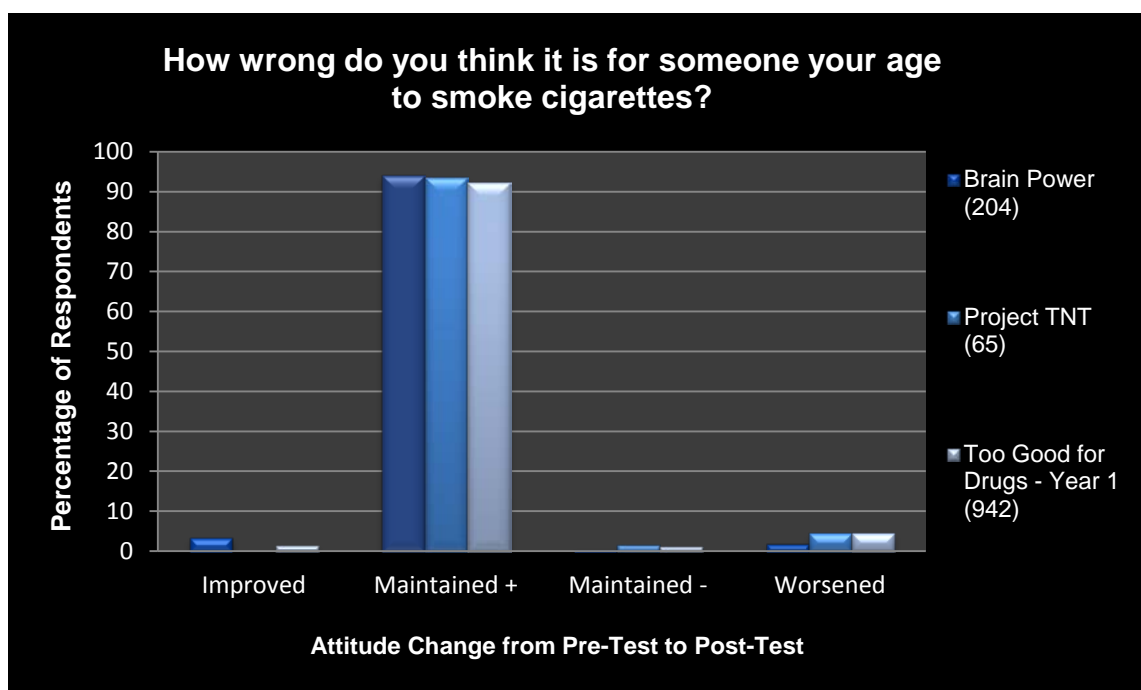
The percentages of middle and high school multi-year program participants showing positive outcomes (maintaining a response that alcohol use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 6, the combined percentages of participants in the Improved and Maintained+ categories are:

- All Stars (Year 1) – 94.1%
- LifeSkills Training (Year 1) – 85.6%
- LifeSkills Training (Year 2) – 86.3%
- Project ALERT (Year 1) – 85.8%
- Project ALERT (Year 2) – 82.5%

## Attitudes Toward Cigarette Use

Figures 7 through 9 below represent changes in individual attitudes towards daily cigarette use from the pre-test to the post-test, by program. Figure 7 shows the change in individual attitudes toward cigarette use from pre- to post-test for single-year programs that served elementary school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 7: Change in Attitudes Toward Cigarette Use by Program: Elementary School Youth in Single-Year Programs**

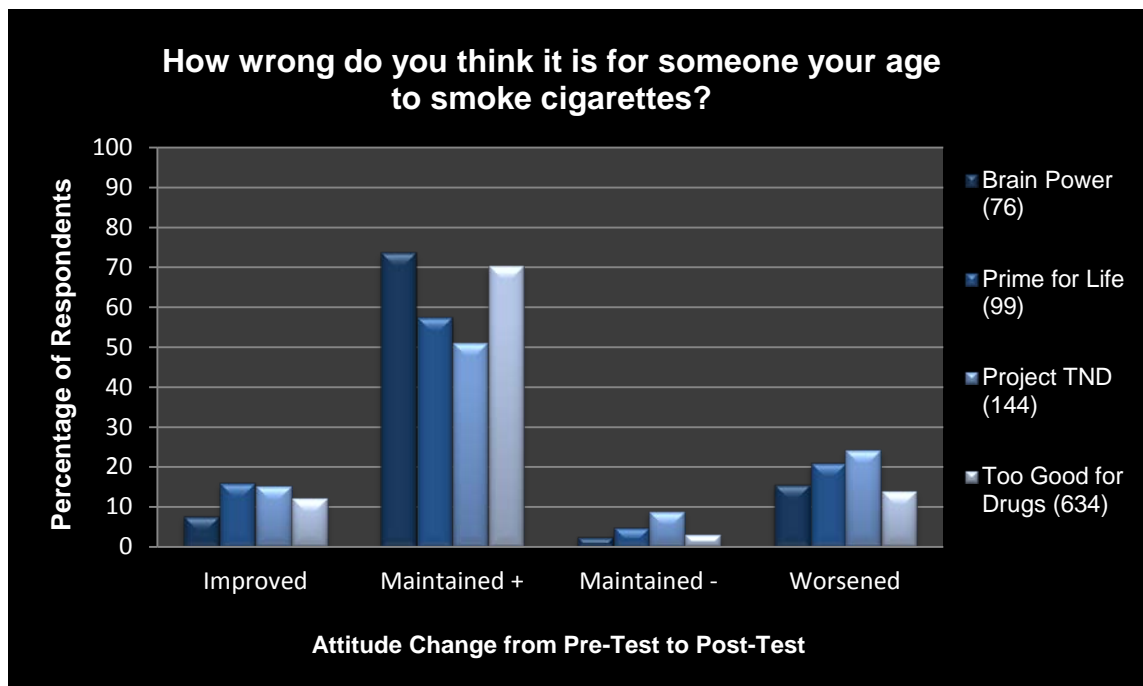


The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that cigarette use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 7, adding together Improved and Maintained+, these percentages are:

- Brain Power – 97.6%
- Project Towards No Tobacco Use – 93.9%
- Too Good for Drugs – 94.0%

Figure 8 below shows the change in individual attitudes toward cigarette use from pre- to post-test for single-year programs that served middle and high school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 8: Change in Attitudes Toward Cigarette Use by Program: Middle and High School Youth in Single-Year Programs**

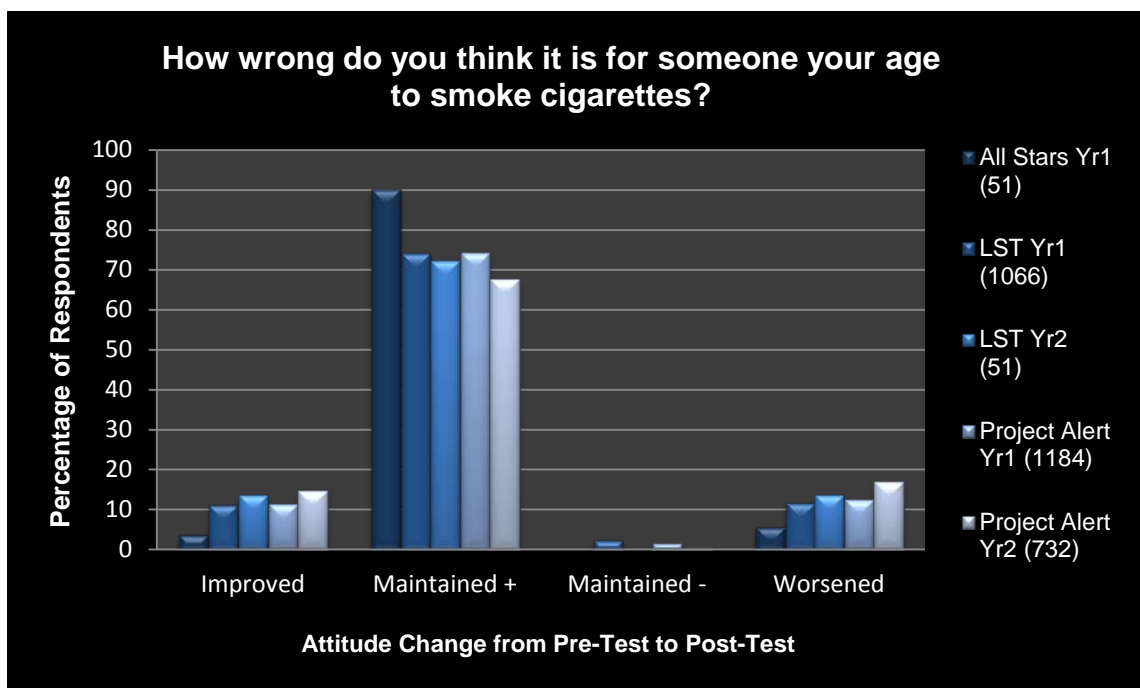


The percentages of middle and high school single-year program participants showing positive outcomes (maintaining a response that cigarette use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 8, adding together Improved and Maintained+, these percentages are:

- Brain Power – 81.6%
- Prime for Life – 82.2%
- Project Towards No Drug Abuse – 78.5%
- Too Good for Drugs – 86.0%

Figure 9 below shows the change in individual attitudes toward cigarette use from pre- to post-test for multi-year programs that served middle and high school youth. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 9: Change in Attitudes Toward Cigarette Use by Program: Middle and High School Youth in Multi-Year Programs**



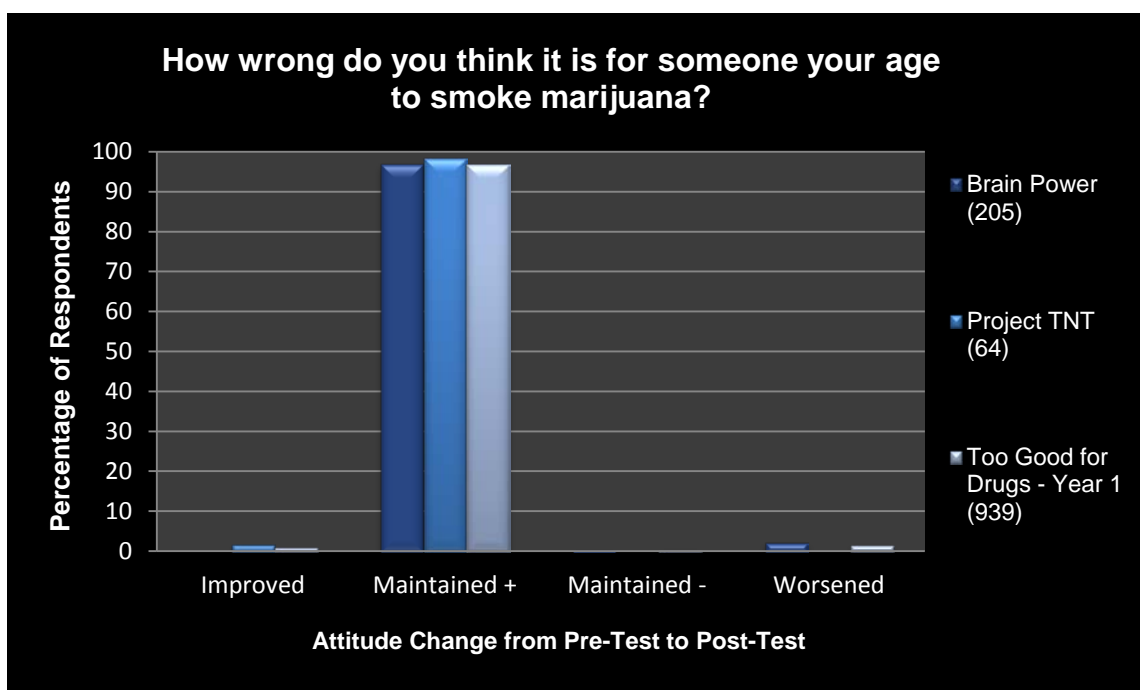
The percentages of middle and high school multi-year program participants showing positive outcomes (maintaining a response that cigarette use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 9, adding together Improved and Maintained+, these percentages are:

- All Stars (Year 1) – 92.2%
- LifeSkills Training (Year 1) – 89.2%
- LifeSkills Training (Year 2) – 92.0%
- Project ALERT (Year 1) – 87.6%
- Project ALERT (Year 2) – 86.9%

## Attitudes Toward Marijuana Use

The following figures show change in individual attitudes toward marijuana use from the pre-test to the post-test, by program. Figure 10 shows the change in individual attitudes toward marijuana use from pre- to post-test for single-year programs that served elementary school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 10: Change in Attitudes Toward Marijuana Use by Program: Elementary School Youth in Single-Year Programs**

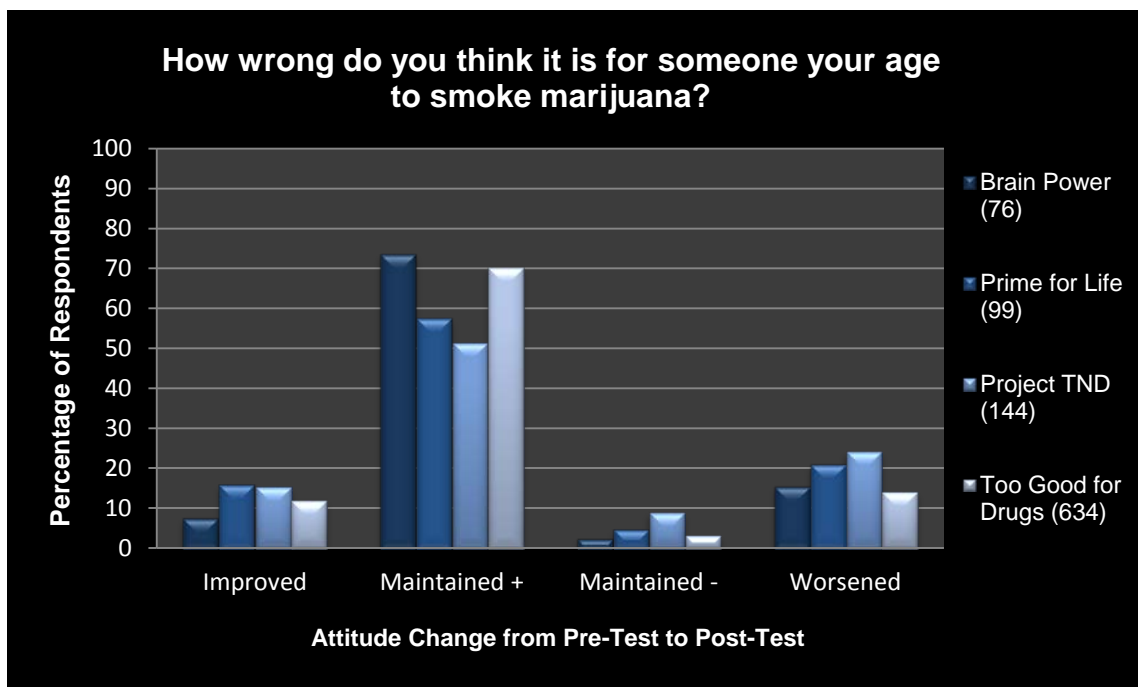


The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that marijuana use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 10, combining Improved and Maintained+, these percentages are:

- Brain Power – 97.1%
- Project Towards No Tobacco Use – 100%
- Too Good for Drugs – 97.9%

Figure 11 below shows the change in individual attitudes toward marijuana use from pre- to post-test for single-year programs that served middle and high school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 11: Change in Attitudes Toward Marijuana Use by Program: Middle and High School Youth in Single-Year Programs**

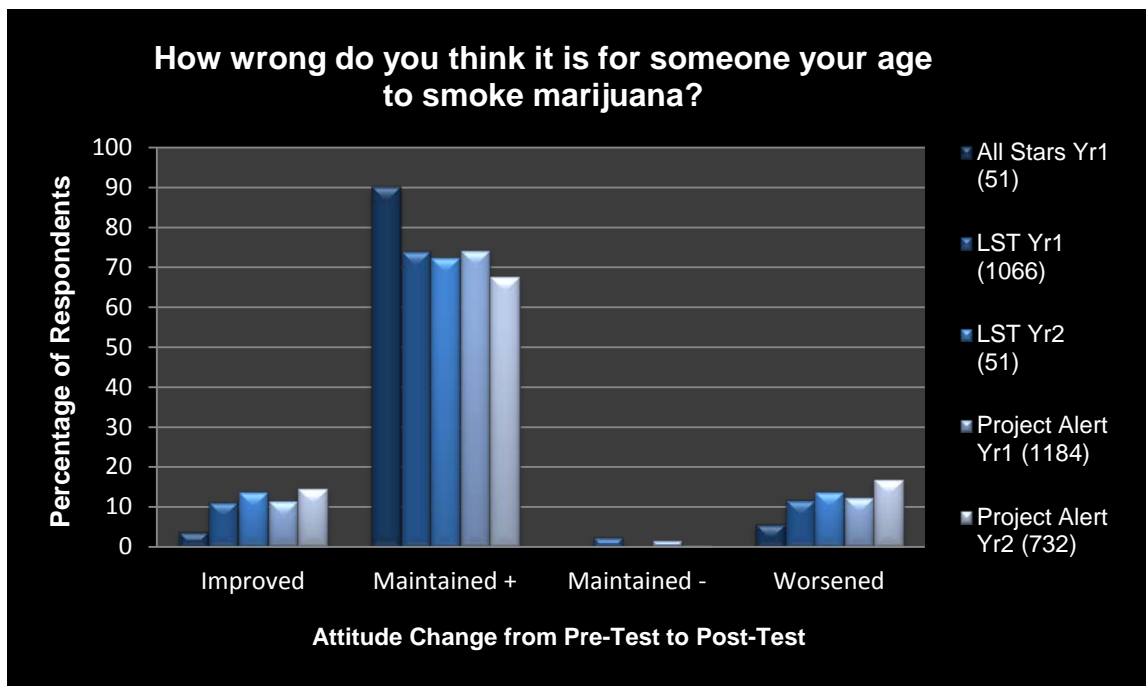


The percentages of middle and high school single-year program participants showing positive outcomes (maintaining a response that marijuana use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 11, combining Improved and Maintained+, these percentages are:

- Brain Power – 92.0%
- Prime for Life – 81.6%
- Project Towards No Drug Abuse – 81.3%
- Too Good for Drugs – 88.6%

Figure 12 below shows the change in individual attitudes toward marijuana use from pre- to post-test for multi-year programs that served middle and high school youth. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 12: Change in Attitudes Toward Marijuana Use by Program: Middle and High School Youth in Multi-Year Programs**



The percentages of middle and high school multi-year program participants showing positive outcomes (maintaining a response that marijuana use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”) reflect good outcomes. From the data for Figure 12, combining Improved and Maintained+, these percentages are:

- All Stars (Year 1) – 94.1%
- LifeSkills Training (Year 1) – 91.3%
- LifeSkills Training (Year 2) – 95.7%
- Project ALERT (Year 1) – 93.5%
- Project ALERT (Year 2) – 91.8%



## Summary of Positive Outcomes for Attitudes Toward Substance Use

Table 4 below shows the average positive outcome (improved plus maintained+) percentage for Comprehensive Prevention participants for each substance by program level group.

**Table 4: Positive Outcome Percentages for Attitudes Toward Substance Use by Participant Group**

Average Positive Outcome Percentages for Attitudes Toward Substance Use			
Participant Group	Alcohol	Cigarettes	Marijuana
Elementary School Youth in Single Year Programs	92.0%	95.1%	98.3%
Middle and High School Youth in Single Year Programs	76.2%	82.1%	85.9%
Middle and High School Youth in Multi-Year Programs	86.9%	89.6%	93.3%

In all three groups, the percentage of students believing it is wrong for someone their age to use marijuana was greater than the percentage believing it is wrong for someone their age to use alcohol or cigarettes. The percentage of students believing it is wrong for someone their age to use cigarettes was greater than the percentage believing it is wrong for someone their age to use alcohol.

## Perceived Risk of Harm from Substance Use

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Figures 13 through 21 on the following pages show change from pre- to post-test in individuals' perceptions of risk of harm from substance use, by program. Data for participants completing the Younger Youth survey (primarily elementary school youth) are provided first, followed by data for those completing the regular Comprehensive Prevention Survey (middle- and high-school youth). Programs are grouped according to program duration (single-year and multi-year programs); however there were no data for elementary school level multi-year programs this year. The change values presented in the figures do not necessarily indicate statistically significant differences from pre-test to post-test. The number in parentheses after each program in the figures is the number of respondents answering the question on the pre-test and the post-test.

Perceived risk responses are coded on a Likert scale from "no risk" to "great risk." Individual perceptions of risk either:

- 1) improved, which means that their reported perception of risk of harm from using alcohol, cigarettes, or marijuana moved up the scale from pre-test to post-test towards "great risk," from any point on the scale (e.g., respondent felt alcohol use posed "no risk" at pre-test and "moderate risk" at post-test);
- 2) maintained +, which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarette, or marijuana use (that use posed "moderate risk" or "great risk");
- 3) maintained -, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use (that use posed "slight risk" or "no risk"); or



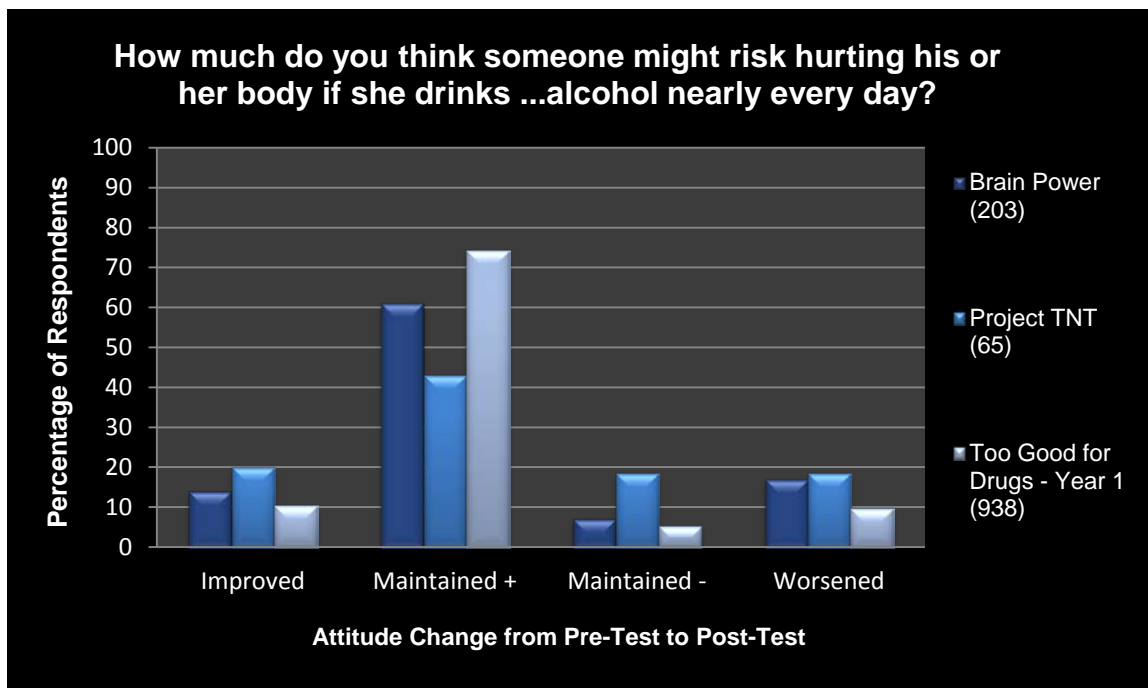
- 4) worsened, meaning that their reported perception of risk of harm moved down the scale from pre-test to post-test away from “great risk,” from any point on the scale (e.g., respondent reported that marijuana use posed “moderate risk” of harm at pre-test and “slight risk” at post-test).

Maintaining a response from pre-test to post-test that use poses “moderate risk” or “great risk,” or moving up the scale towards “great risk” from any point on the scale is considered a positive outcome.

### Perceived Risk of Harm from Alcohol Use

Figure 13 shows the change in individuals’ perception of risk of harm from alcohol use from pre- to post-test for single-year programs serving elementary school youth. The elementary school youth group contains some 6<sup>th</sup> graders (7.9% of total), although all completed the Younger Youth survey. Agencies administered the YY survey to 6<sup>th</sup> graders who were in the second or third year of multi-year programs and had taken the YY survey in the previous grade(s). Thus, data would be consistent for those participants across program years. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 13: Change in Perceived Risk of Harm from Alcohol Use by Program: Elementary School Youth in Single-Year Programs**



The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that alcohol use poses "moderate risk" or “great risk,” or moving up the scale towards “great risk”) reflect good outcomes. From the data for Figure 13, adding together Improved and Maintained+, these percentages are:

- Brain Power – 75.4%
- Project Towards No Tobacco Use – 63.1%
- Too Good for Drugs – 84.9%

Figure 14 shows the change in individuals' perception of risk of harm from alcohol use from pre- to post-test for single-year programs serving middle and high school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 14: Change in Perceived Risk of Harm from Alcohol Use by Program: Middle and High School Youth in Single-Year Programs**

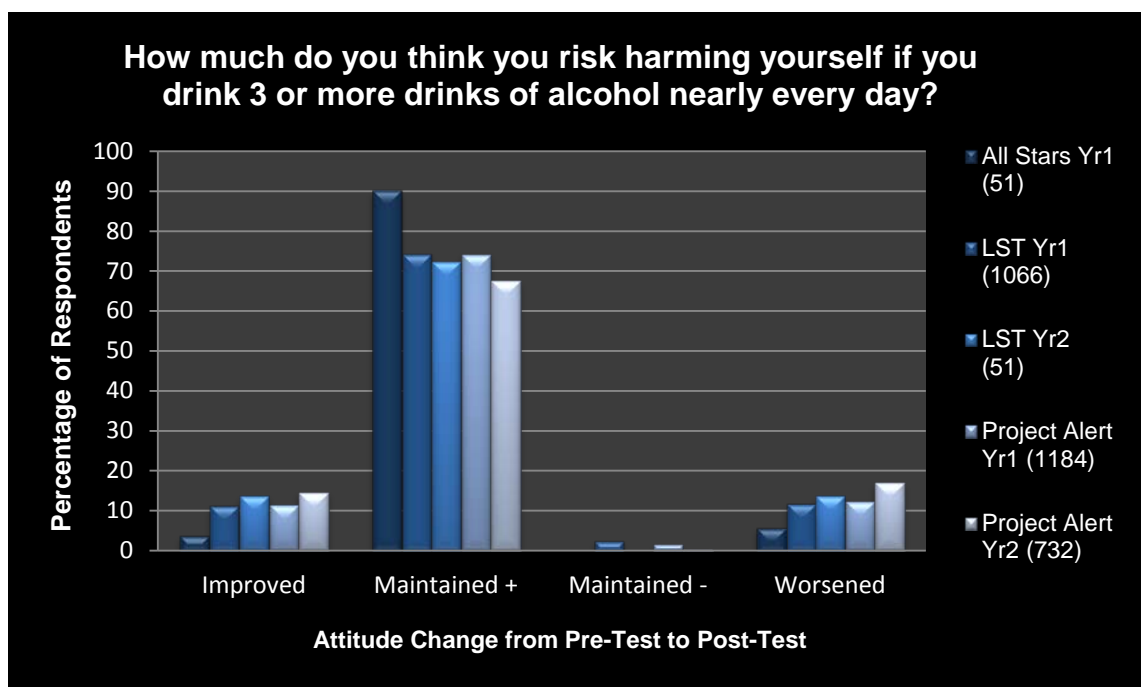


The percentages of middle and high school single-year program participants showing positive outcomes (maintaining a response that alcohol use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 14, adding together Improved and Maintained+, these percentages are:

- Brain Power – 84.0%
- Prime for Life – 75.3%
- Project Towards No Drug Abuse – 77.8%
- Too Good for Drugs – 82.0%

Figure 15 below shows the change in individuals' perception of risk of harm from alcohol use from pre- to post-test for multi-year programs serving middle and high school youth. These data present individual years of the programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 15: Change in Perceived Risk of Harm from Alcohol Use by Program: Middle School Youth in Multi-Year Programs**



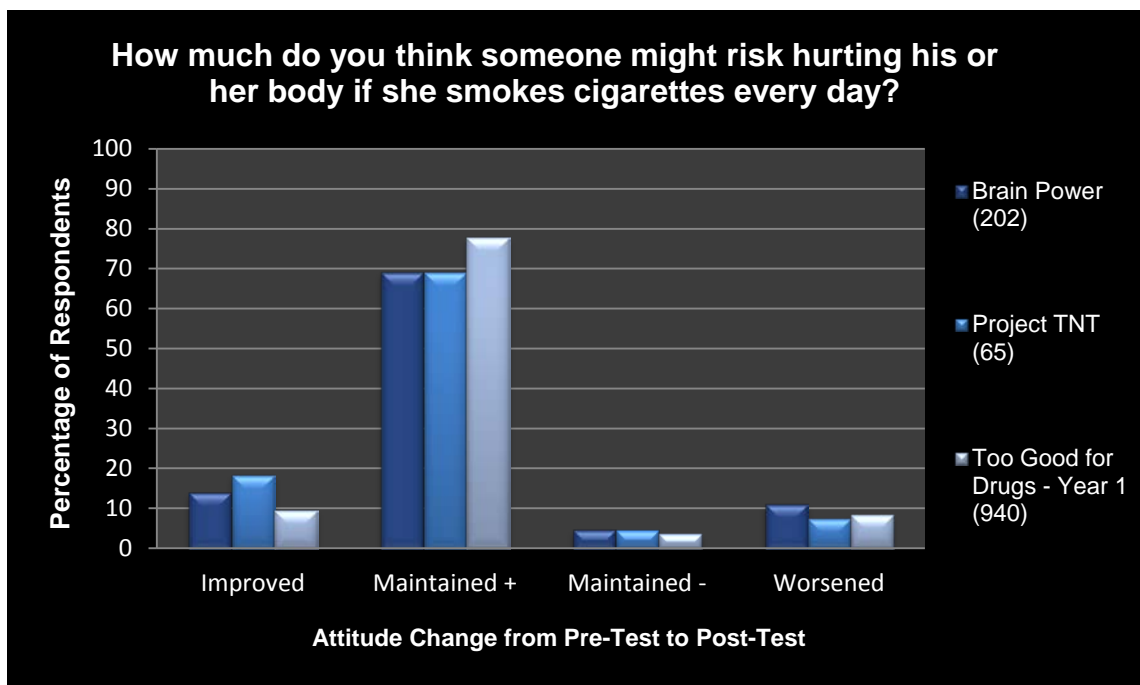
The percentages of middle and high school multi-year program participants showing positive outcomes (maintaining a response that alcohol use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 15, adding together Improved and Maintained+, these percentages are:

- All Stars (Year 1) – 88.2%
- LifeSkills Training (Year 1) – 82.4%
- LifeSkills Training (Year 2) – 76.5%
- Project ALERT (Year 1) – 85.1%
- Project ALERT (Year 2) – 88.3%

## Perceived Risk of Harm from Cigarette Use

Figure 16 below shows the change in individuals' perception of risk of harm from cigarette use from pre- to post-test for single-year programs serving elementary school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 16: Change in Perceived Risk of Harm from Cigarette Use by Program: Elementary School Youth in Single-Year Programs**



The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that cigarette use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 16, combining Improved and Maintained+, these percentages are:

- Brain Power – 83.7%
- Project Towards No Tobacco Use – 87.7%
- Too Good for Drugs – 87.6%

Figure 17 below shows the change in individuals' perception of risk of harm from cigarette use from pre- to post-test for single-year programs serving middle and high school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 17: Change in Perceived Risk of Harm from Cigarette Use by Program: Middle and High School Youth in Single-Year Programs**

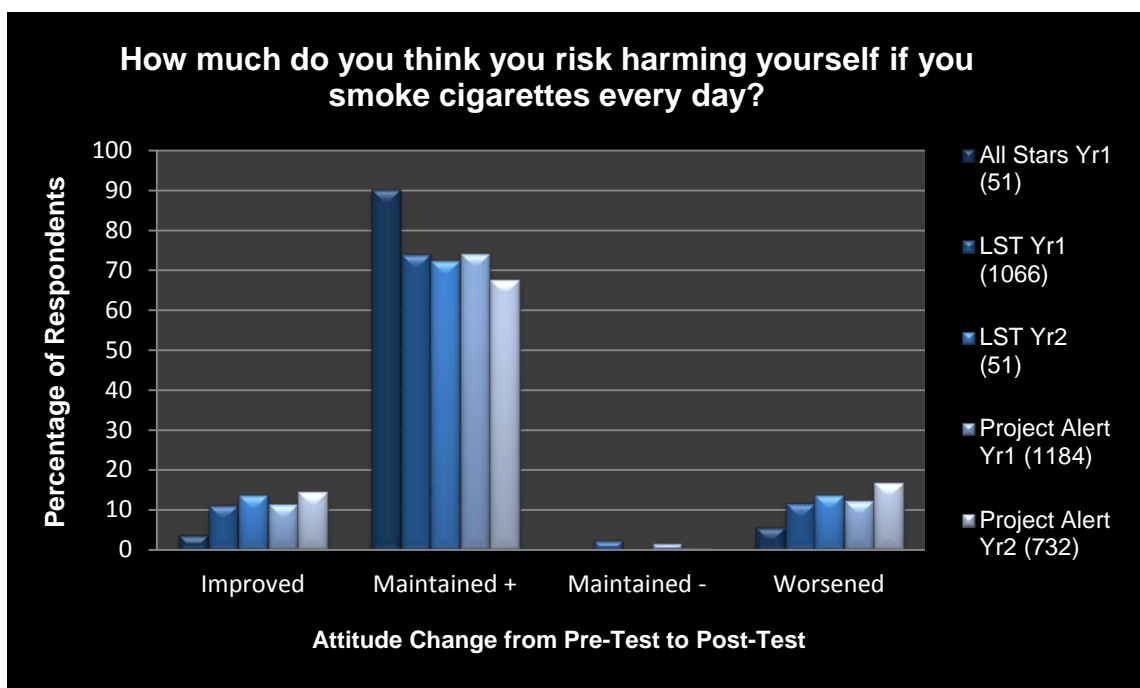


The percentages of middle and high school single-year program participants showing positive outcomes (maintaining a response that cigarette use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 17, combining Improved and Maintained+, these percentages are:

- Brain Power – 90.7%
- Prime for Life – 84.2%
- Project Towards No Drug Abuse – 83.3%
- Too Good for Drugs – 86.6%

Figure 18 below shows the change in individuals' perception of risk of harm from cigarette use from pre- to post-test for multi-year programs serving middle and high school youth. These data present individual years of the programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 18: Change in Perceived Risk of Harm from Cigarette Use by Program: Middle School Youth in Multi-Year Programs**



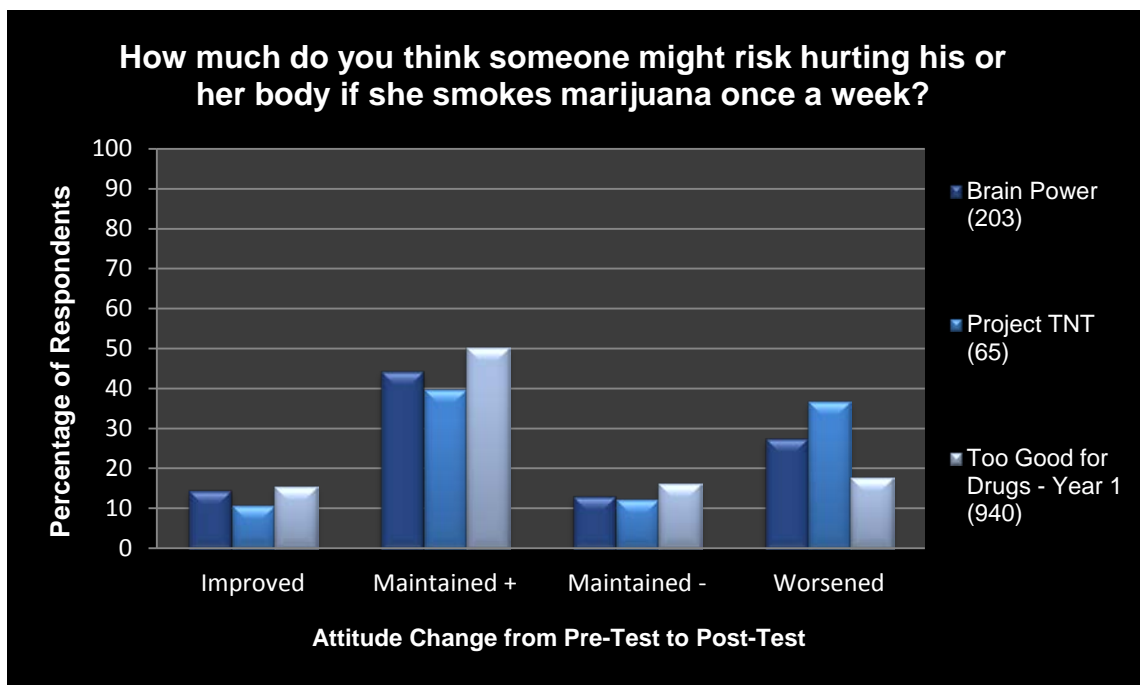
The percentages of middle and high school multi-year program participants showing positive outcomes (maintaining a response that cigarette use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 18, combining Improved and Maintained+, these percentages are:

- All Stars (Year 1) – 98.0%
- LifeSkills Training (Year 1) – 88.5%
- LifeSkills Training (Year 2) – 87.2%
- Project ALERT (Year 1) – 88.3%
- Project ALERT (Year 2) – 89.7%

## Perceived Risk of Harm from Marijuana Use

Figure 19 below shows the change in individuals' perception of risk of harm from marijuana use from pre- to post-test for single-year programs serving elementary school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 19: Change in Perceived Risk of Harm from Marijuana Use by Program: Elementary School Youth in Single-Year Programs**



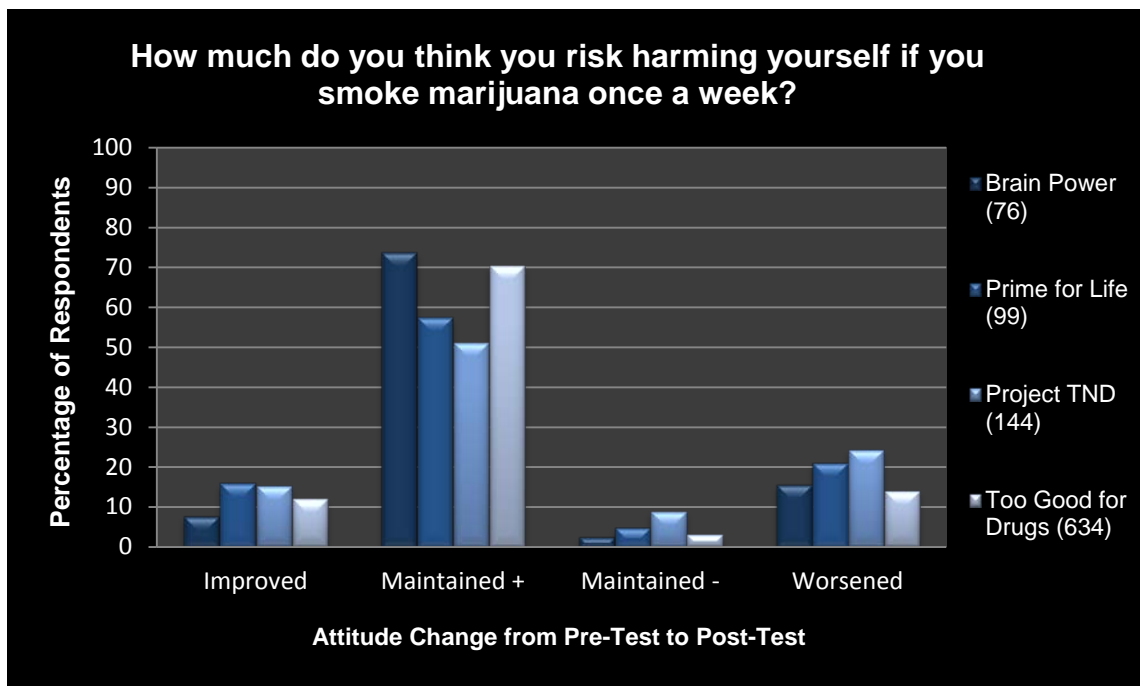
The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that marijuana use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 19, adding together Improved and Maintained+, these percentages are as follows:

- Brain Power – 59.1%
- Project Towards No Tobacco Use – 50.8%
- Too Good for Drugs – 65.9%



Figure 20 below shows the change in individuals' perceptions of risk of harm from marijuana use from pre- to post-test for single-year programs serving middle and high school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 20: Change in Perceived Risk of Harm from Marijuana Use by Program: Middle and High School Youth in Single-Year Programs**

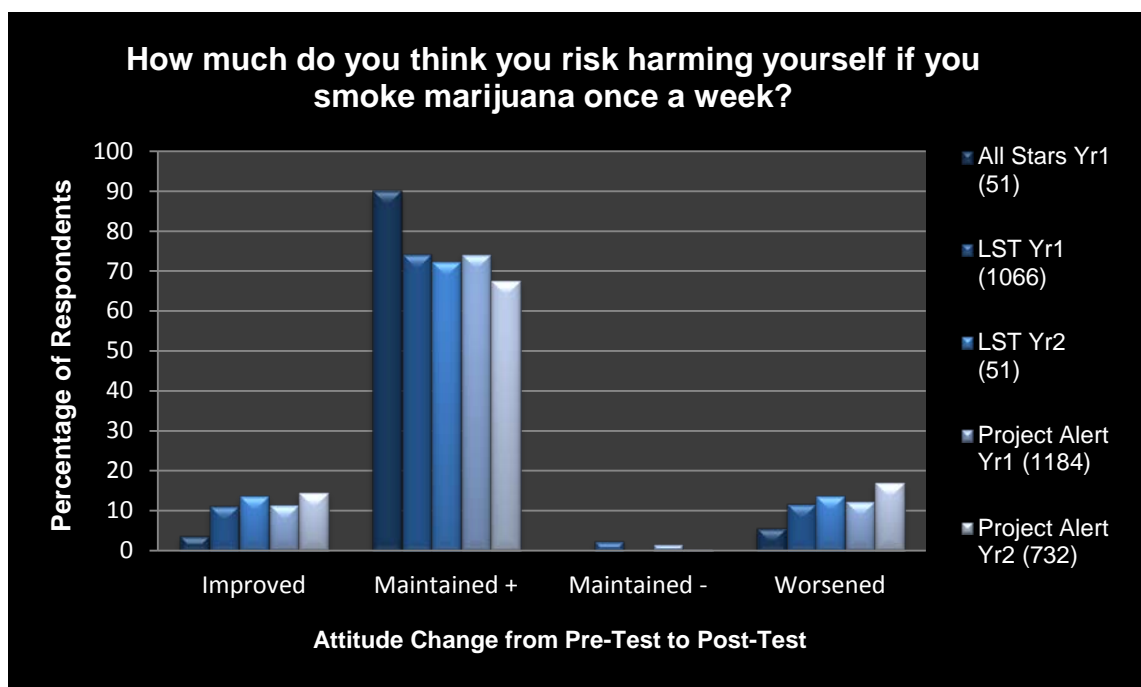


The percentages of middle and high school single-year program participants showing positive outcomes (maintaining a response that marijuana use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 20, adding together Improved and Maintained+, these percentages are:

- Brain Power – 80.0%
- Prime for Life – 77.0%
- Project Towards No Drug Abuse – 70.4%
- Too Good for Drugs – 76.7%

Figure 21 below shows the change in individuals' perception of risk of harm from marijuana use from pre- to post-test for multi-year programs serving middle and high school youth. These data present individual years of the programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.

**Figure 21: Change in Perceived Risk of Harm from Marijuana Use by Program: Middle and High School Youth in Multi-Year Programs**



The percentages of middle and high school multi-year program participants showing positive outcomes (maintaining a response that marijuana use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") reflect good outcomes. From the data for Figure 21, adding together Improved and Maintained+, these percentages are:

- All Stars (Year 1) – 92.2%
- LifeSkills Training (Year 1) – 78.0%
- LifeSkills Training (Year 2) – 86.3%
- Project ALERT (Year 1) – 80.9%
- Project ALERT (Year 2) – 81.4%

## Summary of Positive Outcomes for Perceived Risk of Harm from Substance Use

Table 5 shows the average positive outcome (improved or maintained+) percentage for Comprehensive Prevention participants for each substance by program level group.

**Table 5: Positive Outcome Percentages for Perceived Risk of Harm from Substance Use by School Group**

Average Positive Outcome Percentages for Perception of Risk of Harm from Substance Use			
School Group	Alcohol	Cigarettes	Marijuana
Elementary School Youth in Single Year Programs	74.4%	86.3%	58.6%
Middle and High School Youth in Single Year Programs	79.8%	86.2%	76.0%
Middle and High School Youth in Multi-Year Programs	84.1%	90.4%	83.8%

For all groups, the percentage of students believing regular marijuana use poses risk of harm is less than the percentages believing cigarette and alcohol use pose risk of harm. It is noteworthy that the percentage of elementary school students believing marijuana use poses risk is lower than the percentages for the middle and high school student groups. The percentage believing cigarette use poses risk is higher for all groups than the percentages believing alcohol and marijuana pose risk of harm.

## Diversion Program Outcomes

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Diversion programs are prevention programs for indicated populations of youth who have already experienced legal or other consequences from their substance use. Hence, Diversion program data are presented separately from the Universal prevention programs. Diversion programs also tend to be shorter in duration than other prevention programs, and usually span fewer than 30 days. Therefore, pre-test data presented below on substance use reflect use reported in the 30 days prior to starting the program and completing the pre-test, and post-test data reflect use reported for the timeframe from the start of the program or completion of the pre-test to the end of the program or completion of the post-test. One hundred sixty-three Diversion program participants completed both a pre-test and a post-test survey. The median age for these participants was 17 and the median grade was 11th.

### Diversion Program Outcomes: Past 30-Day Use

Table 6 on the following page presents data on the percentage of Diversion program participants reporting use of alcohol, binge drinking (5 or more drinks in a row), cigarettes, and marijuana at the pre-test and the amount and direction of change at post-test. Iowa Youth Survey data also are provided.



**Table 6: Change in Substance Use: Diversion Program Participants**

Percentage of Youth Reporting Use at the Pre-Test and Change at Post-Test: Diversion Program Participants										
Group	N	Median Age	Alcohol		Binge Drinking		Cigarettes		Marijuana	
			Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	46,257 <sup>2</sup>	15 <sup>3</sup>	–	<b>+6.30</b>	–	<b>+5.00</b>	–	<b>+2.70</b>	–	<b>+2.70</b>
Diversion	163	17 <sup>4</sup>	44.72	<b>-18.63</b>	24.22	<b>-11.80</b>	22.36	<b>-4.97</b>	21.74	<b>-9.94</b>

<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating Iowa students in grades 8 and 11. Data were from the 2012 Iowa Youth Survey, State of Iowa report.

<sup>2</sup> The total number of 8<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 24,294, and the total number of 11<sup>th</sup> graders was 21,963.

<sup>3</sup> The median age of 8<sup>th</sup> graders completing the 2012 Iowa Youth Survey was 13.5 years, and the median age of 11<sup>th</sup> graders was 16.5 years.

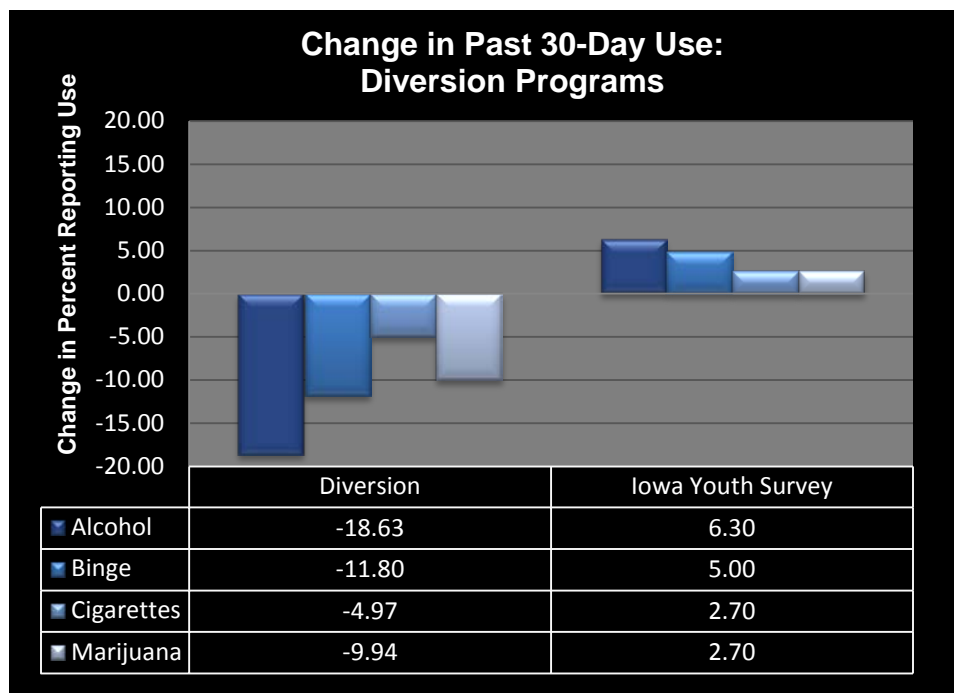
<sup>4</sup> Diversion participants ranged in age from 12 to 19 and were in grade 7 through post-high school.

The decreases in alcohol, binge drinking and marijuana use are statistically significant (McNemar test results are: Alcohol,  $p < 0.0001$ ; binge drinking,  $p = 0.0005$ ; marijuana use,  $p = 0.0015$ ).



Figure 22 below displays, graphically, the change in past 30-day use from pre- to post-test for Diversion programs participants.

**Figure 22: Change in Past 30-Day Use: Diversion Program Participants**



### Attitudes Toward Substance Use

Attitude responses are coded on a Likert scale from “not wrong at all” to “very wrong.”

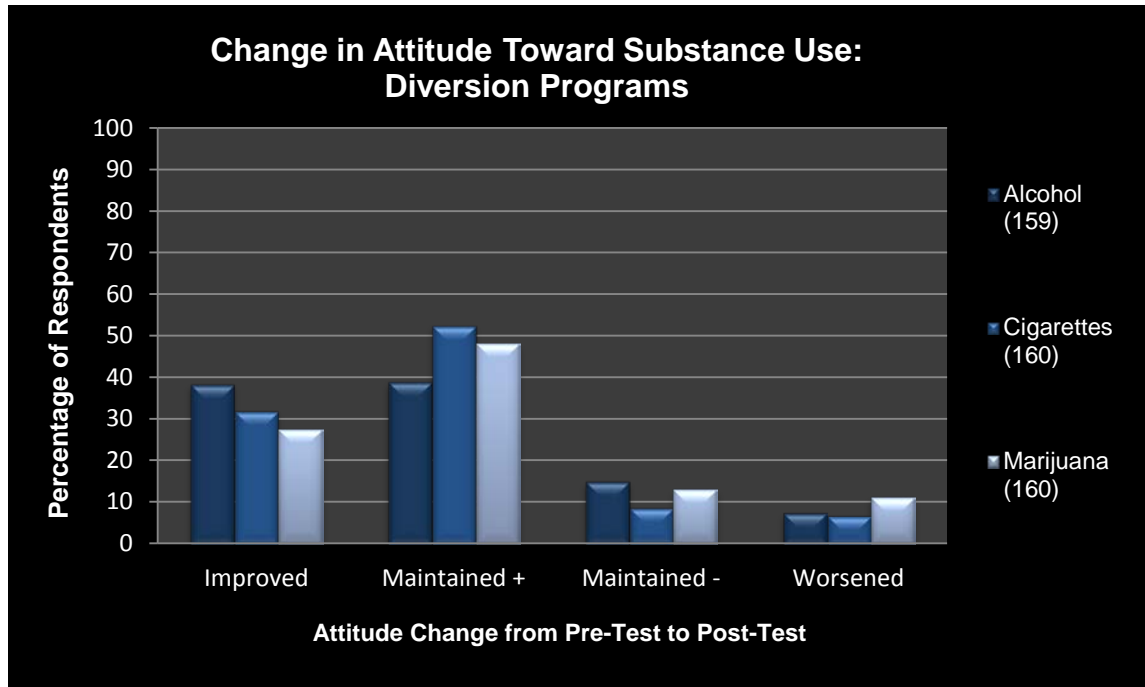
Individual attitudes either:

- 1) improved, which means that attitudes moved up the scale towards “very wrong” from any point on the scale (e.g., respondent felt alcohol use was wrong at pre-test and very wrong at post-test);
- 2) maintained +, which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarette, or marijuana use (“wrong” or “very wrong”);
- 3) maintained -, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use (“a little wrong” or “not wrong at all”); or
- 4) worsened, meaning that attitudes moved down the scale away from “very wrong” from any point on the scale (e.g., respondent felt marijuana use was “wrong” at pre-test and “a little bit wrong” at post-test). Maintaining a response from pre-test to post-test that use is “wrong” or “very wrong,” or moving up the scale towards “very wrong” from any point on the scale is considered a positive outcome.

Figure 23 on the following page represents data on the change in attitude toward alcohol, cigarette, and marijuana use from pre-test to post-test for Diversion program participants. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test. The number in parentheses after each substance name in

the figure is the number of respondents answering the question on both the pre-test and the post-test.

**Figure 23: Change in Attitudes Toward Substance Use: Diversion Program**



The percentages of Diversion program participants showing positive attitude outcomes (maintaining a response that use is “wrong” or “very wrong,” or moving up the scale towards “very wrong”, i.e., "Improved" plus "Maintained +") for each substance are:

- Alcohol – 77.4%
- Cigarettes – 84.4%
- Marijuana – 75.6%

Thirty-eight percent of participants moved up the scale towards “very wrong” regarding alcohol use, thirty-two percent moved up the scale towards “very wrong” regarding cigarette use, and twenty-eight percent moved up the scale towards “very wrong” regarding marijuana use.

### Perceived Risk of Harm from Substance Use

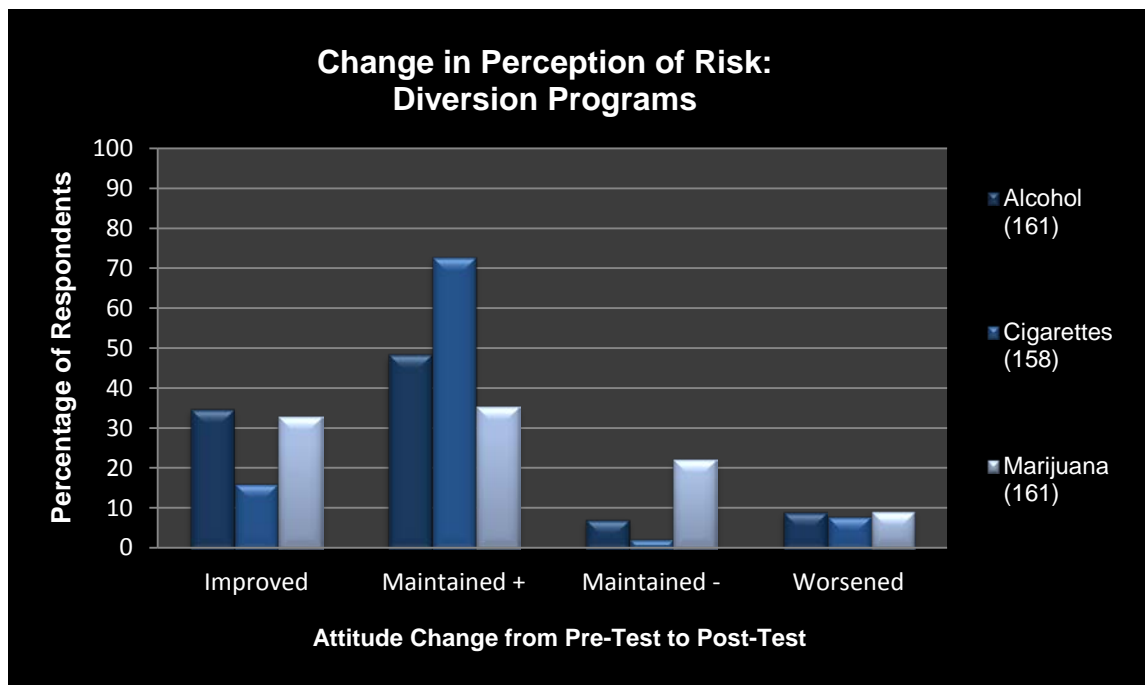
Perceived risk responses are coded on a Likert scale from “no risk” to “great risk.” Individual perceptions of risk either:

- 1) improved, which means that their reported perception of risk of harm from using alcohol, cigarettes, or marijuana moved up the scale from pre-test to post-test towards “great risk,” from any point on the scale (e.g., respondent felt alcohol use posed “no risk” at pre-test and “moderate risk” at post-test);
- 2) maintained +, which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarette, or marijuana use (that use posed “moderate risk” or “great risk”);

- 3) maintained –, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use (that use posed “slight risk” or “no risk”); or
- 4) worsened, meaning that their reported perception of risk of harm moved down the scale from pre-test to post-test away from “great risk,” from any point on the scale (e.g., respondent reported that marijuana use posed “moderate risk” of harm at pre-test and “slight risk” at post-test).

Maintaining a response from pre-test to post-test that use poses “moderate risk” or “great risk,” or moving up the scale towards “great risk” from any point on the scale is considered a positive outcome. Figure 24 presents data on the change in perception of risk of harm from alcohol, cigarette, and marijuana use from pre-test to post-test for Diversion program participants. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test. The number in parentheses after each substance name in the figures is the number of respondents answering the question on both the pre-test and the post-test.

**Figure 24: Change in Perceived Risk of Harm from Substance Use: Diversion Program**



The percentages of Diversion program participants showing positive perceived risk outcomes (maintaining a response that use poses moderate or great risk, or moving up the scale towards “great risk,” i.e., combining Improved and Maintained +) for each substance are as follows:

- Alcohol – 83.2%
- Cigarettes – 89.2%
- Marijuana – 68.3%

Thirty-five percent of participants moved up the scale towards “great risk” regarding alcohol use, sixteen percent moved up the scale towards “great risk” regarding cigarette use, and thirty-three percent moved up the scale towards “great risk” regarding marijuana use.

## CONCLUSION

The results of the evaluation of the Comprehensive Prevention project answer the following questions:

- *Has alcohol/tobacco/marijuana usage changed in the target population?*

There was no statistical evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for Comprehensive Prevention Project participants as a whole (excluding Diversion program participants); the same was true for each prevention program presented: However, this also means that use of those substances among participants showed no evidence of increasing as would be expected due to maturation.

There were statistically significant decreases in the use of alcohol, binge drinking and marijuana for Diversion program participants.

- *Has the percentage of the target population who indicate desirable attitudes (i.e., that it is wrong to use substances) at baseline (pre-test) maintained or increased after the intervention (post-test)?*

Ninety percent or more of participants in the three elementary school programs showed positive outcomes for attitudes toward alcohol use (maintained a response from pre-test to post-test that use is “wrong” or “very wrong,” or moved up the scale towards “very wrong” from any point on the scale). Seven of the nine middle and high school program groups (counting each year of multi-year programs as a separate group) showed positive outcomes above 81% for attitude toward alcohol use. Project Towards No Drug Abuse had the lowest percentage, with 66.7% of participants showing positive outcomes, followed by Prime for Life with 73.7%. All Stars - Year 1 had the highest positive outcome percentage at 94.1%.

Ninety-three percent or more of participants in elementary school programs showed positive outcomes for attitudes toward cigarette use, and eight of the nine middle and high school program groups showed positive outcomes of 81% or more. Project Towards No Drug Abuse had the lowest percentage, with 78.5% of participants showing positive outcomes for attitudes toward cigarette use. All Stars - Year 1 had the highest positive outcome percentage at 92.2%.

The elementary school programs showed positive outcomes of 97% or more for attitude toward marijuana use. Six of the nine middle and high school program groups showed positive outcomes above 91% for attitude toward marijuana use. Project Towards No Drug Abuse had the lowest percentage, with 81.3% of participants showing positive outcomes, followed by Prime for Life with 81.6% and Too Good for Drugs with 88.6% positive outcomes. LifeSkills Training - Year 2 had the highest positive outcome percentage at 95.7%.

For Diversion programs, more than 77% of participants showed positive outcomes for attitudes regarding alcohol use, more than 84% showed positive outcomes regarding attitude toward cigarette use, and nearly 76% showed positive outcomes regarding attitude toward marijuana use. It is noteworthy that 38% of Diversion participants moved up the scale (further toward “very wrong”) for alcohol use and 32% moved up the scale for cigarette use.





- *Has perception of risk of harm from alcohol/tobacco/marijuana use maintained a positive response or increased from pre-test to post-test?*

Two of the three elementary school programs had 75% or more of participants show positive outcomes for perception of risk of harm from alcohol use (maintained a response from pre-test to post-test that use poses “moderate risk” or “great risk,” or moved up the scale towards “great risk” from any point on the scale). Project Towards No Tobacco Use had the lowest percentage, with 63% of participants show positive outcomes; Too Good for Drugs had the highest positive outcome percentage at 84.9%. Six of the nine middle and high school program groups (counting each year of multi-year programs as a separate group) had 82% or more of participants with positive outcomes. Prime for Life had the lowest percentage, with 77.8% of participants showing positive outcomes for perceived risk of harm from alcohol use. Project ALERT - Year 2 and All Stars - Year 1 had the highest positive outcome percentages at 88.3% and 88.2%, respectively.

Regarding perception of risk of harm from cigarette use, 83% or more of participants in the elementary school programs showed positive outcomes. All of the middle and high school program groups had positive outcomes of 83% or more. All Stars - Year 1 had the highest positive outcome percentage at 98.0%, followed by Brain Power at 90.7%.

Regarding perception of risk of harm from marijuana use, positive outcome percentages for the elementary school program groups ranged from 50.8% to 65.9%. Project Towards No Tobacco Use was the lowest performer. The middle and high school program groups had positive outcome percentages above 70%. Project Towards No Drug Abuse has the lowest percentage at 70.4%; All Stars - Year 1 had the highest percentage at 92.2%.

For Diversion programs, just over 83% of participants showed positive outcomes for perceived risk of harm from alcohol use, just over 89% showed positive outcomes for perceived risk for cigarette use, and more than 68% showed positive outcomes for perceived risk for marijuana use. It is noteworthy that 35% of Diversion participants moved up the scale (further toward “very wrong”) for alcohol use and 33% moved up the scale for marijuana use.

It is important to consider the populations served by these programs when assessing their performance. Project Towards No Drug Abuse was the lowest performer for attitudes toward use of all substances and lowest on perceived risk of harm for marijuana use. However, some of the populations served by the program were selective or indicated rather than universal, and these outcomes may meet or exceed goals or expectations for those groups. Alternatively, outcomes for the Diversion programs were quite positive given the indicated populations served, and agencies implementing Project Towards No Drug Abuse with selective and indicated populations may want to consider replacing that program with curricula used in the Diversion programs.

Considering that the positive outcome percentages for the elementary student group for perceived risk of harm from marijuana use were lower than those percentages for the middle and high school groups, evaluators recommend agencies identify and implement elementary-level programming containing greater emphasis on the risks of marijuana use.

Attrition places a caveat on the results presented in this report. Nearly 12% of the population served attrite. Based on the attrition analysis, the Evaluators recommend prevention agencies assess the cross-cultural acceptability of the prevention programs they implement and increase efforts to engage and retain African American and multi-racial youth. The Evaluators also recommend agencies increase efforts to engage and retain 13 and 14 year old participants.



# Appendix A

## Survey Instruments

# Comprehensive Prevention Survey

(Recommended for Participants in Grade 6 and above)



## COMPREHENSIVE PREVENTION SURVEY

### Administrative Section

1.a. Is this a pre-test or a post-test?	_____ Pre-test    _____ Post-test
b. What program year is this survey for? (For single-year programs, circle "1".)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
2. What month is it?	_____
3. What day of the month is it?	_____
4. What year is it?	20 <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
5. What is your agency/service area?	_____
6. What is the prevention program?	_____
7. How long is this program running for this group (in weeks)?	_____ Weeks
8. What is this program's <u>curriculum</u> level?  <i>[Please select the school level that the curriculum being taught to this student is designed for, regardless of what grade this student is in school.]</i>	<input type="checkbox"/> Elementary Curriculum <input type="checkbox"/> Middle School Curriculum <input type="checkbox"/> High School Curriculum
9. What is the location of implementation? [Numerical Code]	_____
10. What IOM population category is this program group?	<input type="checkbox"/> Universal <input type="checkbox"/> Selective <input type="checkbox"/> Indicated

### Demographics

11. What is your current age?	_____ 8 or younger	_____ 12	_____ 16
	_____ 9	_____ 13	_____ 17
	_____ 10	_____ 14	_____ 18
	_____ 11	_____ 15	_____ 19 or older
12. What grade are you in?	_____ 5 <sup>th</sup>	_____ 8 <sup>th</sup>	_____ 11 <sup>th</sup>
	_____ 6 <sup>th</sup>	_____ 9 <sup>th</sup>	_____ 12 <sup>th</sup>
	_____ 7 <sup>th</sup>	_____ 10 <sup>th</sup>	_____ Adult/Not in School
13. Are you a male (boy) or a female (girl)?	_____ Male (Boy)	_____ Female (Girl)	



14. Are you Hispanic or Latino?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15. Which of the following best describes you? (please choose one)	<input type="checkbox"/> White	
	<input type="checkbox"/> Black/African American	
	<input type="checkbox"/> American Indian/Alaska Native	
	<input type="checkbox"/> Asian	
	<input type="checkbox"/> Native Hawaiian/Other Pacific Islander	
	<input type="checkbox"/> Some other race	
<input type="checkbox"/> More than one race		

**My Beliefs and Attitudes**

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

16. Drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?  
 Very wrong     Wrong     A little wrong     Not wrong at all

17. Smoke cigarettes?  
 Very wrong     Wrong     A little wrong     Not wrong at all

18. Smoke marijuana?  
 Very wrong     Wrong     A little wrong     Not wrong at all

19. Use any illegal drug other than alcohol, cigarettes, or marijuana?  
 Very wrong     Wrong     A little wrong     Not wrong at all

20. Use prescription drugs that were not prescribed for you, or in a way other than the directions?  
 Very wrong     Wrong     A little wrong     Not wrong at all

21. Use over the counter medications different from the directions?  
 Very wrong     Wrong     A little wrong     Not wrong at all

**How much do you think you risk harming yourself (physically or otherwise) if you:**

22. Drink 3 or more drinks (glasses, cans or bottles of beer; glasses of wine, liquor or mixed drinks) of alcohol nearly every day?  
 No risk     Slight risk     Moderate risk     Great risk

23. Smoke cigarettes every day?  
 No risk     Slight risk     Moderate risk     Great risk

24. Smoke marijuana once a week?  
 No risk     Slight risk     Moderate risk     Great risk



**How much do you think you risk harming yourself (physically or otherwise) if you:** (This section is continued from the previous page.)

25. Use any other illegal drug (other than alcohol, cigarettes, or marijuana) once a week?  
 \_\_\_\_\_ No risk      \_\_\_\_\_ Slight risk      \_\_\_\_\_ Moderate risk      \_\_\_\_\_ Great risk

26. Use medication prescribed for someone else?  
 \_\_\_\_\_ No risk      \_\_\_\_\_ Slight risk      \_\_\_\_\_ Moderate risk      \_\_\_\_\_ Great risk

27. Use over the counter medications different from the directions?  
 \_\_\_\_\_ No risk      \_\_\_\_\_ Slight risk      \_\_\_\_\_ Moderate risk      \_\_\_\_\_ Great risk

**My Experiences**

**(For the Pre-Test) In the past 30 days, have you:  
 (For the Post-Test) In the past 30 days, or since you started the program – whichever is a shorter time – have you:**

28. Had at least one drink of alcohol (glass, bottle or can of beer; glass of wine, liquor or mixed drink)?	_____ Yes	_____ No
29. Had 5 or more drinks of alcohol (glasses, bottles or cans of beer; glasses of wine, liquor, mixed drinks) in a row, that is within a couple of hours?	_____ Yes	_____ No
30. Smoked cigarettes?	_____ Yes	_____ No
31. Smoked cigars?	_____ Yes	_____ No
32. Used smokeless tobacco (chewing tobacco, snuff, plug, dipping tobacco)?	_____ Yes	_____ No
33. Used marijuana (pot, grass, hash, bud, weed)?	_____ Yes	_____ No
34. Taken any <u>other</u> illegal drug (like cocaine, methamphetamines, barbiturates, heroin, hallucinogens) without a doctor's prescription?	_____ Yes	_____ No
35. Used prescription medications that were not prescribed for you by your doctor?	_____ Yes	_____ No
36. Used over the counter medications different from the directions?	_____ Yes	_____ No

**During the past 12 months, have you:**

37. Talked with at least one of your parents about the dangers of tobacco, alcohol, or drug use? By parents, we mean your biological parents, adoptive parents, stepparents, or adult guardians, whether or not they live with you.	_____ Yes	_____ No
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**Thank you for your participation!**



# Comprehensive Prevention Survey for Younger Youth

(Recommended for Participants in Grades 4 and 5)



**COMPREHENSIVE PREVENTION  
SURVEY INSTRUMENT  
FOR YOUNGER YOUTH (4<sup>TH</sup> – 5<sup>TH</sup> GRADES)**

**Administrative Section  
(for facilitators to complete)**

1. a. Is this a pre-test or a post-test?	_____ Pre-test    _____ Post-test
b. What program year is this survey for? (For single-year programs, circle "1". For multi-year programs, circle the year of the program.)	1            2            3            4            5
2. What month is it?	_____
3. What day of the month is it?	_____
4. What year is it?	20 <input type="text"/> <input type="text"/>
5. What is your agency/service area?	_____
6. What is the prevention program?	_____
7. How long is this program running for this group (in weeks)?	_____ Weeks
8. What is this program's <u>curriculum</u> level?  <i>[Please select the school level that the curriculum being taught to this student is designed for, regardless of what grade this student is in school.]</i>	_____ Elementary Curriculum _____ Middle School Curriculum _____ High School Curriculum
9. What is the location of implementation? [Numerical Code]	_____
10. What population category is this program group?	_____ Universal    _____ Selective    _____ Indicated

**Demographics  
(for facilitator or student to complete)**

11. How old are you?	_____ 8 or younger	_____ 11
	_____ 9	_____ 12
	_____ 10	_____ 13
12. What grade are you in?	_____ 4 <sup>th</sup> grade	_____ 6 <sup>th</sup> grade
	_____ 5 <sup>th</sup> grade	
13. Are you a male (boy) or a female (girl)?	_____ Male (Boy)	_____ Female (Girl)







# Appendix B

Institute of Medicine Categories of  
Populations Served  
by Agency and Program

## Institute of Medicine Population Categories by Agency and Program

AGENCY	PROGRAM	POPULATION SERVED (IOM CATEGORY)
Alcohol and Drug Dependency Services of Southeast Iowa	LifeSkills Training	Universal-Direct
	Project ALERT	Universal-Direct
Area Substance Abuse Council, Area 6	Adults and Children Together	Indicated
	All Stars	Selective
	LifeSkills Training	Universal-Direct
	Prime for Life	Indicated
	Project Towards No Drug Abuse Families and Schools Together	Selective and Universal
		Selective
Center for Alcohol and Drug Services	Too Good For Drugs	Universal-Direct
Community and Family Resources	JADE	Indicated
	Too Good for Drugs	Universal-Direct
Compass Pointe	Diversion (Juvenile Alcohol & Drug Education)	Indicated
	Prime for Life	Universal
Employee and Family Resources, Area 13	LifeSkills Training	Universal-Direct
	Too Good for Drugs	
Employee and Family Resources, Area 16	Too Good for Drugs	Universal-Direct
Employee and Family Resources, Area 20	LifeSkills Training	Universal-Direct
Helping Services for Northeast Iowa, Inc.	(No data submitted this year)	
MECCA SERVICES	LifeSkills Training	Universal-Direct
New Opportunities	LifeSkills Training	Universal-Direct
Pathways Behavioral Services, Inc.	Diversion (Prime for Life)	Indicated
Prairie Ridge Addiction Treatment Services	Diversion (Prime for Life)	Indicated
Substance Abuse Services for Clayton County, Inc.	All Stars	Universal-Direct
Substance Abuse Treatment Unit of Central Iowa	Juvenile Education Groups	Indicated
	Too Good for Drugs	Selective
Southern Iowa Economic Development Association	Brain Power	Universal-Direct
	Project Towards No Tobacco Use	
Trinity Muscatine	LifeSkills Training	Universal-Direct
	Project ALERT	Indicated
	Project Towards No Drug Abuse	
Youth and Shelter Services, Inc., Area 1	Project ALERT	Universal-Direct
	Too Good For Drugs	
Youth and Shelter Services, Inc., Area 2	Project ALERT	Universal-Direct

