



Comprehensive Substance Abuse Prevention Program Evaluation

THE IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

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

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BACKGROUND

Project Overview

The Comprehensive Substance Abuse Prevention Project provides primary alcohol, tobacco, and other drug prevention services to all counties in Iowa. The project is funded through a Substance Abuse Prevention and Treatment 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, 2016 to June 30, 2017.

The Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) was awarded a contract with IDPH to evaluate the project and provide training and technical assistance to the providers on data collection and data entry. In addition, one contractor implemented 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. Another contractor did not have access to schools for programming, so they do not have any surveys to include for this report. One contractor did not enter their post-tests by data cutoff thus their data are not included in this report.

Evaluation Design

The evaluation employs a matched pre-post design, whereby a survey is administered when a participant enters the mentoring program and at the beginning of each subsequent project year (pre-test), then again at the end of each project year (post-test) for all single year and multi-year programs. Two survey instruments are used: the Comprehensive Survey, designed for participants in sixth grade and above; and the Younger Youth (YY) survey, designed for participants in kindergarten through fifth grade. Agency staff collect these data and enter them into an online system called Qualtrics. The Consortium then downloads the data for analyses and reporting. This report provides data for State Fiscal Year 2017 (FY17) and includes participants involved in the program between July 2016 and June 2017.

Agencies submitted 6,056 pre-tests and 5,608 post-tests during FY17. This yielded 5,185 total matched surveys. Matched data include participants completing the Comprehensive and YY 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?

OUTCOMES

Demographics

Demographic data provided here include participants in all programs who completed the Comprehensive or YY survey instrument.

Participants included in this evaluation ranged in age from eight to 19; the median age (at post-test) was 12. Seventy percent of the participants are in middle school (6th through 8th grade students). Males and females almost equally comprise the respondents (50.6% male, 49.4 female), and 10.4% of all respondents are Hispanic or Latino.

Participant racial groups are delineated below:

- 78.8% White
- 4.1% Black/African American
- 1.6% Asian
- 1.1% American Indian/Alaska Native
- 0.3% Native Hawaiian/Other Pacific Islander
- 2.6% Some Other Race
- 10.2% More than one race

Changes from Pre-test to Post-test

Attrition

The evaluators performed an attrition analysis to identify potential differences between participants who terminated their involvement in the program, that is, they did not complete a post-test, and those who remained in the program, that is, they completed a post-test 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 not all students completed a pre-test in FY17. Therefore, determining attrition can be difficult. The evaluators split the analysis into three parts the Regular Comprehensive Prevention participants excluding Diversion, the Younger Youth (YY) participants, and those participants in the Diversion Program.

The following Regular Comprehensive participants were more likely to leave the program:

- Slightly fewer than one in 10 participants took a pre-test but did not take a post-test and were considered attrition cases
- Participants indicating American Indian as their race¹
- Participants who were 17 through 19 years old²
- Respondents in the 8th, 11th, and 12th grades³
- Adolescents who thought drinking alcohol was not wrong at all⁴ and not risky⁵

¹ Cochran-Mantel-Haenszel test $\chi^2 = 16.95$; df = 6; p = .009

² Cochran-Mantel-Haenszel test $\chi^2 = 35.23$; df = 10; p < .001

³ Cochran-Mantel-Haenszel test $\chi^2 = 47.77$; df = 8; p < .001

⁴ Cochran-Mantel-Haenszel test $\chi^2 = 9.13$; df = 3; p = .028

⁵ Cochran-Mantel-Haenszel test $\chi^2 = 13.02$; df = 3; p = .005

- Adolescents who thought smoking cigarettes was not wrong at all⁶ and not risky⁷
- Adolescents who thought that smoking marijuana was not wrong at all⁸ and not risky⁹
- Adolescents who thought that using over-the-counter medications differently from the directions was not wrong at all¹⁰ and not risky¹¹
- The regular Comprehensive Prevention respondents represented by the outcome data in this report differ from those who initiated the program. When interpreting outcomes, take into consideration the selective attrition discussed above.

The following YY participants were more likely to leave the program:

- Less than 2% of YY attrited
- Youth participants indicating Black/African American and Multi-Racial¹² as their race
- Eight and nine year olds¹³
- Participants who indicated that they would only hurt their body a little bit if they smoked marijuana once a week¹⁴

The following Diversion participants were more likely to leave the program:

- Only 1.3% of Diversion participants left the program, there was not any statistically significant group more likely to leave the program.

The Evaluators recommend prevention agencies investigate the differences between racial minorities as certain groups were more likely to attrite, as well as the differences between grades given that 8th, 11th, and 12th graders were more likely to attrite. In addition, given that all regular Comprehensive Prevention participants were less likely to complete a program the less risky they thought alcohol, cigarettes, and marijuana were prevention agencies might want to implement programming with a greater emphasis on the risks of these substances. This is especially important for elementary school programming considering that elementary student groups believe marijuana is less risky than middle and high school aged groups. With the exception of Diversion, nearly all kids perceived alcohol, tobacco, and marijuana as less risky than wrong.

⁶Cochran-Mantel-Haenszel test $\chi^2=21.38$; df =3 ; p < .000

⁷ Cochran-Mantel-Haenszel test $\chi^2= 10.05$; df = 3; p = .018

⁸ Cochran-Mantel-Haenszel test $\chi^2=11.08$; df =3 ; p = .011

⁹ Cochran-Mantel-Haenszel test $\chi^2= 9.28$; df = 3; p = .026

¹⁰ Cochran-Mantel-Haenszel test $\chi^2= 16.50$; df = 3; p = .001

¹¹ Cochran-Mantel-Haenszel test $\chi^2= 15.53$; df = 3; p = .001

¹² Cochran-Mantel-Haenszel test $\chi^2= 14.83$; df = 6; p = .022

¹³ Cochran-Mantel-Haenszel test $\chi^2= 16.99$; df = 5; p = .005

¹⁴Cochran-Mantel-Haenszel test $\chi^2= 6.73$; df = 2; p = .035

Past 30 Day Use

Past 30-day use data are provided for 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. A positive (+) percentage point change indicates an increase in use, whereas a negative (-) change indicates a decrease in use. Individual program data are provided for programs where 50 or more participants completed both a pre-test and a post-test. The YY 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. 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. Kids in the Diversion program are referred from school, a parent, or Juvenile Court. In the case of Juvenile Court, this programming diverts kids from the courtroom.

The Iowa Youth Survey (IYS) data are provided as a reference for interpreting the outcome data in this report. The IYS 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 2016 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 versus the outcomes of youth who complete specific prevention programming under the Comprehensive Prevention project.

The average yearly change was calculated by dividing the difference between grades by the number of years between grades. This was done using 6th and 11th grade IYS data to provide a reference for Comprehensive Prevention Project outcomes in Table 1. This comparison includes all grades who participated in the IYS, as the Comprehensive Prevention participants range from 9th through 12th grades. 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. It is important to note that youth who participated in Comprehensive Prevention programming may also have completed the IYS.

Table 1 on the following page shows past 30-day use for single year programs and year one of multi-year programs. The change values presented in the tables do not necessarily indicate statistically significant differences from pre-test to post-test.

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 in Single-Year Programs and Year One of 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	58,410	13	–	+1.00	–	+0.50	–	+0.50	–	+0.50
Comprehensive Prevention Excluding Diversion – Year 1	3,341	13	9.00	-1.99	1.93	-0.12	2.09	+0.19	1.68	-0.12
LifeSkills Training – Year 1	1,192	13	9.35	-2.12	2.04	-0.76	1.95	-0.59	1.44	-0.17
Project ALERT – Year 1	1,114	12	5.85	-0.72	0.90	+0.36	1.53	+0.63	0.72	-0.18
Prime for Life – Non Diversion	354	14	17.25	-11.37	4.31	-1.96	2.36	-0.39	1.97	-0.79
Too Good for Drugs	352	12	9.83	-1.45	1.72	-0.29	1.16	-0.29	1.45	-0.29
Project Northland	132	13	8.46	0	0.77	+0.77	0.00	+1.54	0	0
Brain Power	58	12	1.72	+1.72	0	0	0	0	0	0
<i>Note: IYS entries indicate the yearly average change in 30-day use between all Iowa students in grades 6th through 8th. These grades were chosen based on the median age of the Comprehensive Prevention participants. Data are from the 2016 Iowa Youth Survey, State of Iowa report (Alcohol from question B16, Binge Drinking from B17, Cigarettes from B34, and Marijuana from B40). The total number of 6th graders completing the 2016 Iowa Youth Survey was 29,275; the total number of 8th graders was 29,135. The median age of 6th graders was 11.5 and 8th graders was 13.</i>										

The increase in alcohol for the Comprehensive Prevention participant group is statistically significant (McNemar test results are: Alcohol, $p < 0.01$). The increase in alcohol for year one of the LifeSkills Training group is statistically significant (McNemar test results are: Alcohol, $p = 0.01$). There is no evidence of change from pre-test to post-test for binge drinking, cigarette, or marijuana use in the combined middle school and high school Comprehensive Prevention participant group or individual program groups. However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation.

Table 2 on the following page shows past 30-day use for year two of multi-year programs. The change values presented in the tables do not necessarily indicate statistically significant differences from pre-test to post-test

Table 2: Change in Past 30-Day Use: Comprehensive Prevention Survey Respondents in Year Two of 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 Year Two of 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	58,410	13	–	+1.00	–	+0.50	–	+0.50	–	+0.50
Comprehensive Prevention	218	13	14.75	-2.76	1.38	-0.92	2.30	-0.92	2.76	0
Project ALERT – Year 2	147	12	15.65	-2.72	2.04	-1.36	3.40	-2.04	4.08	0
LifeSkills Training – Year 2	59	13	13.79	-3.45	0	0	0	+1.72	0	0
<i>Note: IYS entries indicate the yearly average change in 30-day use between all Iowa students in grades 6th through 8th. These grades were chosen based on the median age of the Comprehensive Prevention participants. Data are from the 2016 Iowa Youth Survey, State of Iowa report (Alcohol from question B16, Binge Drinking from B17, Cigarettes from B34, and Marijuana from B40). The total number of 6th graders completing the 2016 Iowa Youth Survey was 29,275; the total number of 8th graders was 29,135. The median age of 6th graders was 11.5 and 8th graders was 13.</i>										

There is no evidence of change from pre-test to post-test for the year two programs. However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation.

Attitudes Toward Substance Use

Figures 1 through 9 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 middle and high school students are provided first, followed by data for programs serving elementary school youth. The elementary school youth group contains some 6th graders, although all of these students completed the YY survey. Programs are grouped according to program duration (single-year/year one of multi-year, and year two of multi-year programs). Multi-year program data present individual years of the program and therefore are not indicative of how the complete program performs. 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. Desired outcomes for these questions are improvement in (“improved”) or positive maintenance (“maintained +”) of attitudes toward substance use. In Figures 1 through 9, a positive outcome percentage is the percent improved plus the percent maintained +.

Attitudes Toward Alcohol Use

Figure 1: Change in Attitudes Toward Alcohol Use by Program: Middle and High School Youth in Single Year and Year One of Multi-Year Programs

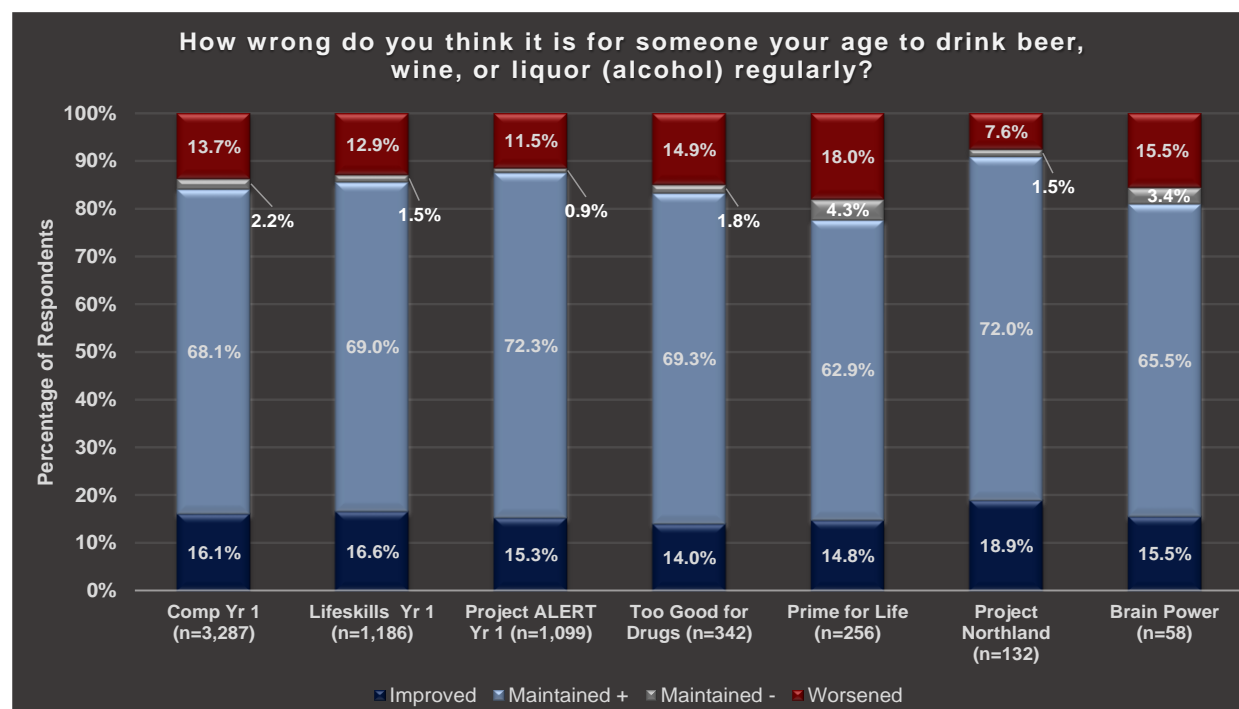


Figure 2: Change in Attitudes Toward Alcohol Use by Program: Middle and High School Youth in Year Two of Multi-Year Programs

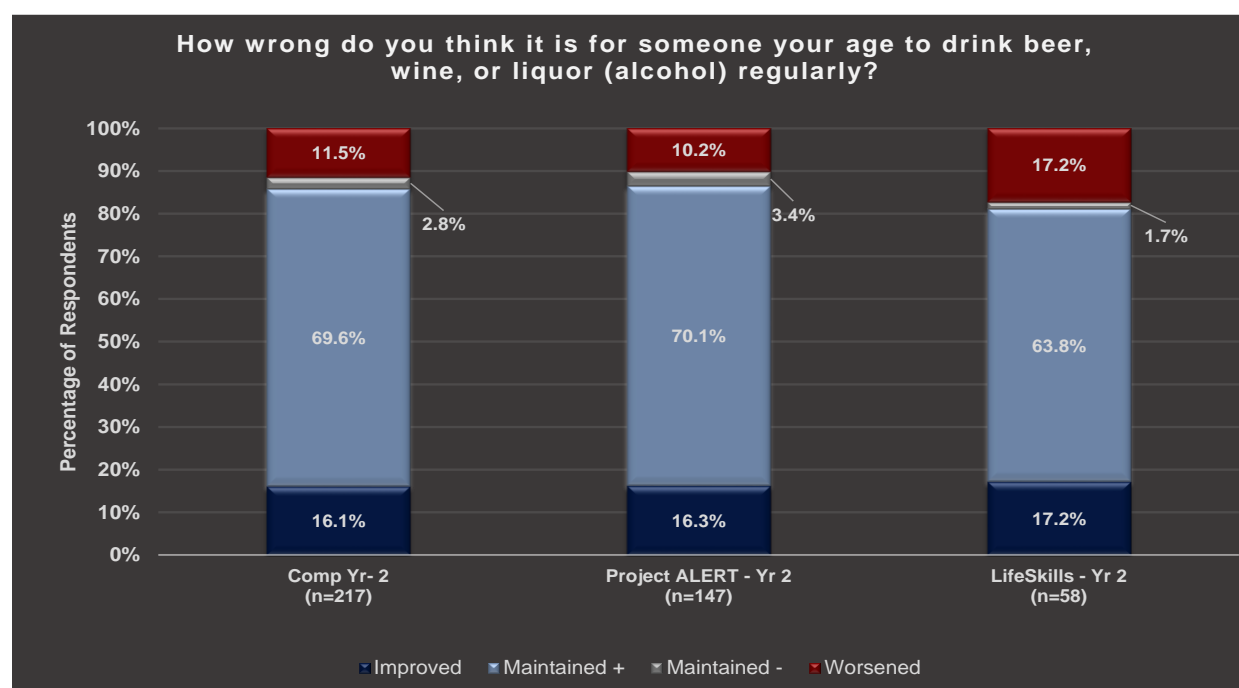
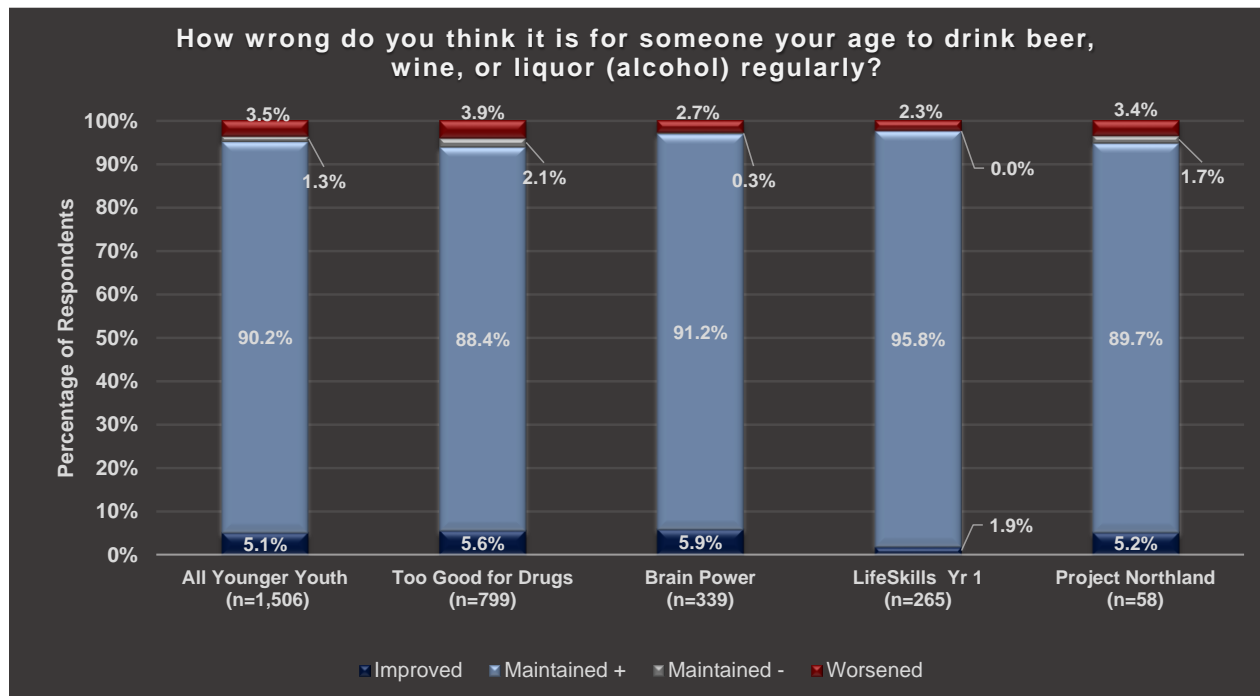


Figure 3: Change in Attitudes Toward Alcohol Use by Program: Elementary School Youth in Single Year and Year One of Multi-Year Programs



Attitudes Toward Cigarette Use

Figure 4: Change in Attitudes Toward Cigarette Use by Program: Middle and High School Youth in Single Year and Year One of Multi-Year Programs

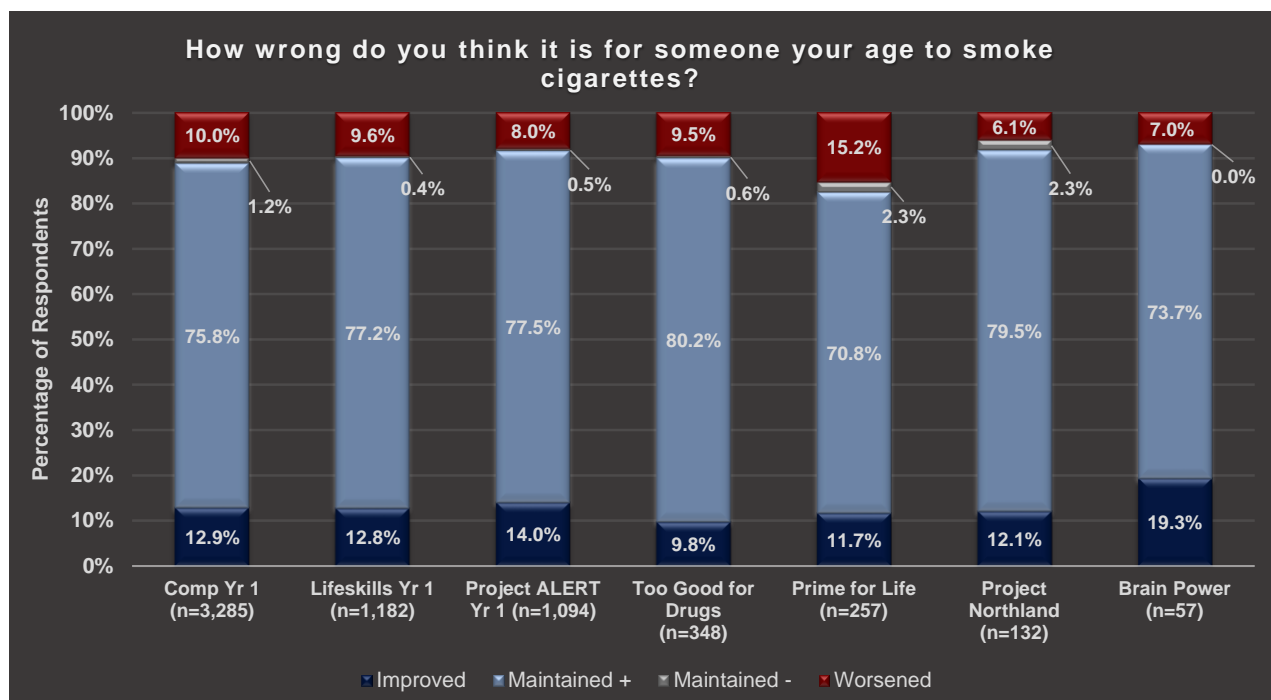


Figure 5: Change in Attitudes Toward Cigarette Use by Program: Middle and High School Youth in Year Two of Multi-Year Programs

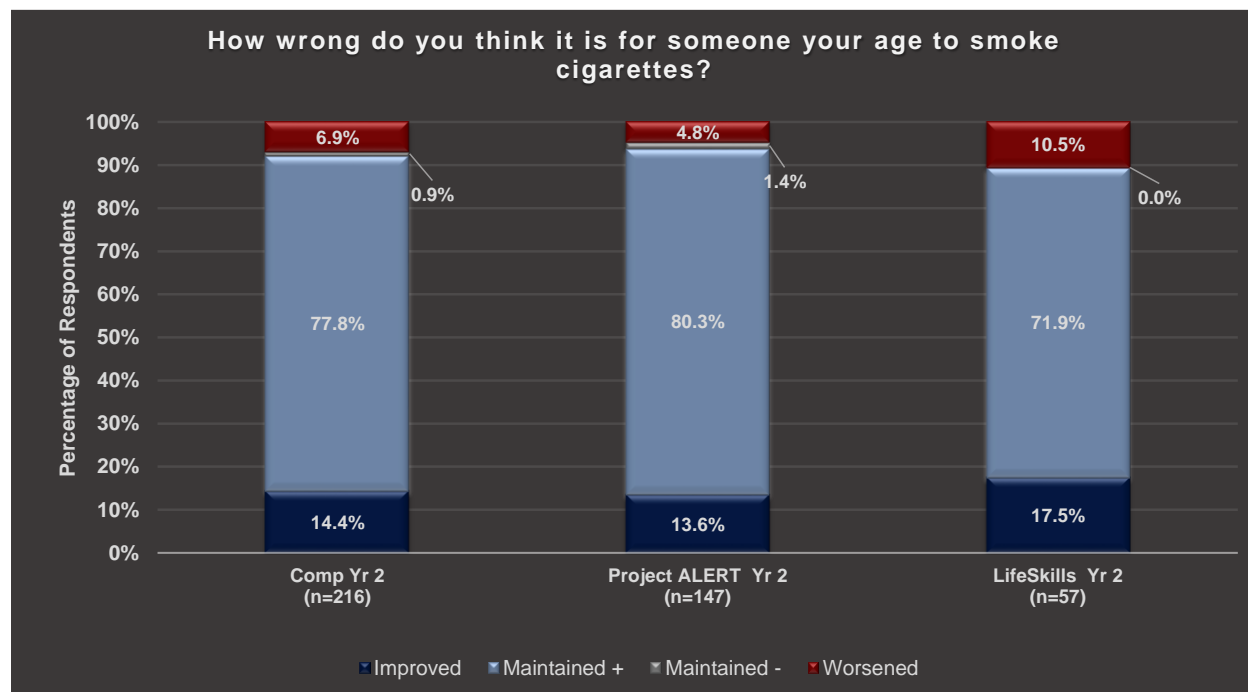
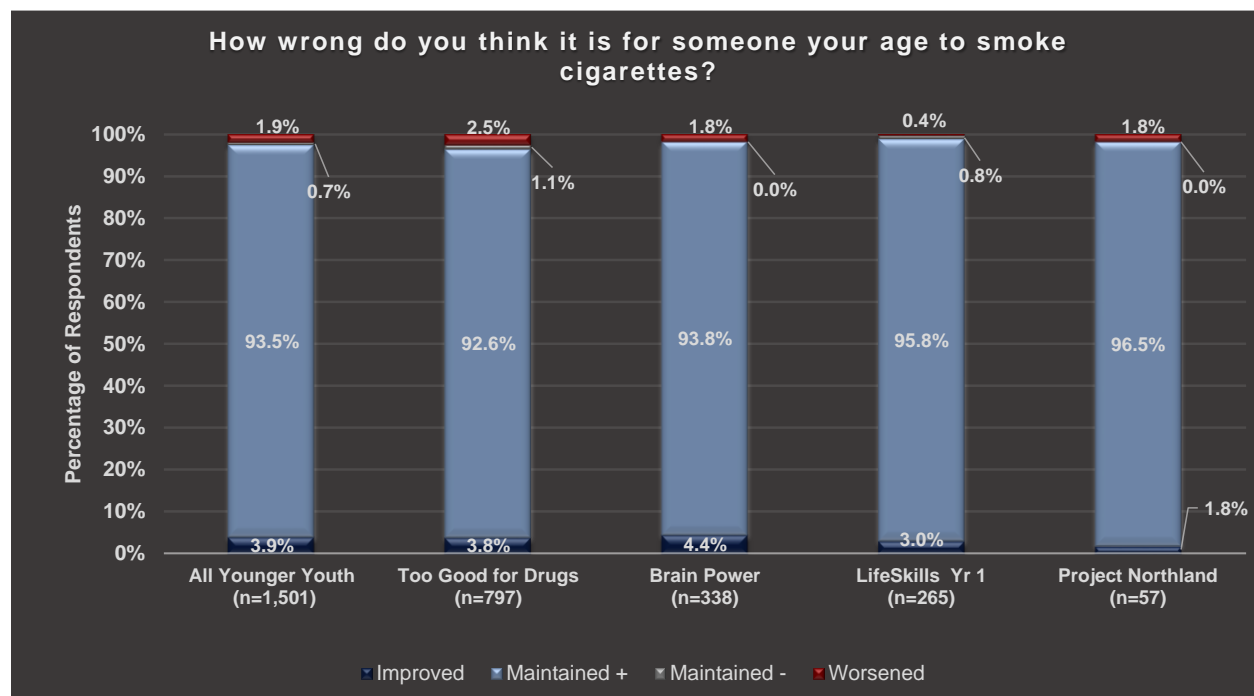


Figure 6: Change in Attitudes Toward Cigarette Use by Program: Elementary School Youth in Single Year and Year One of Multi-Year Programs



Attitudes Toward Marijuana Use

Figure 7: Change in Attitudes Toward Marijuana Use by Program: Middle and High School Youth in Single Year and Year One of Multi-Year Programs

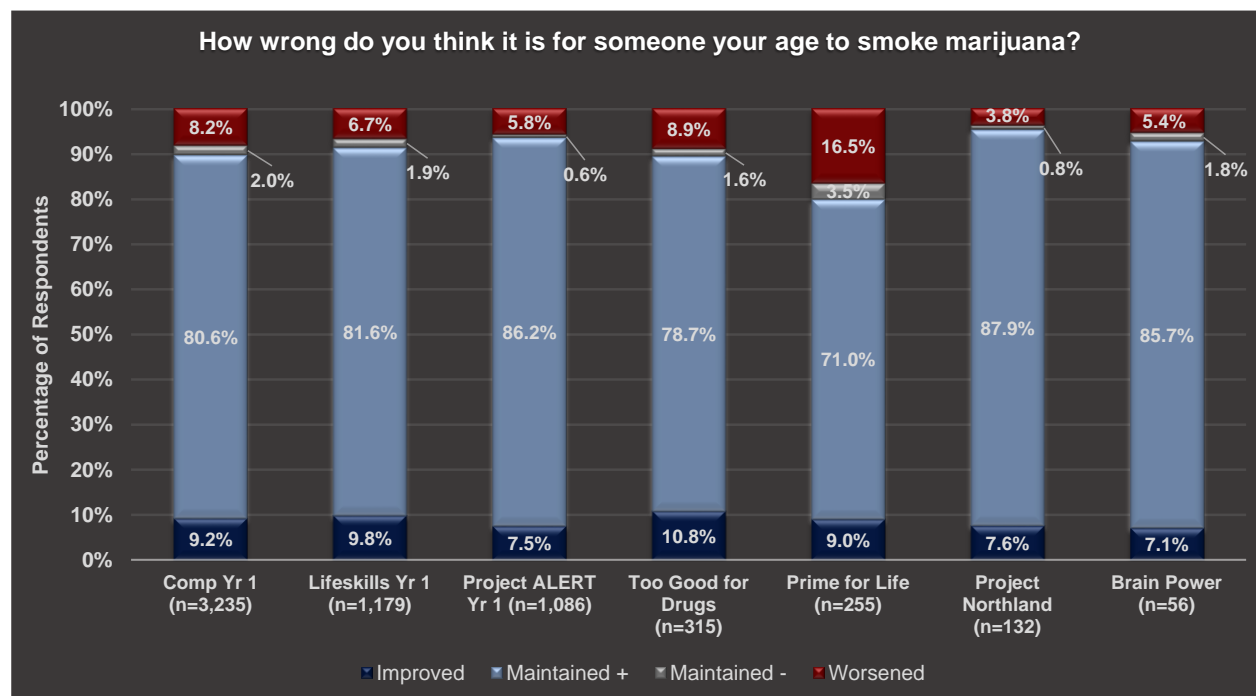


Figure 8: Change in Attitudes Toward Marijuana Use by Program: Middle and High School Youth in Year Two of Multi-Year Programs

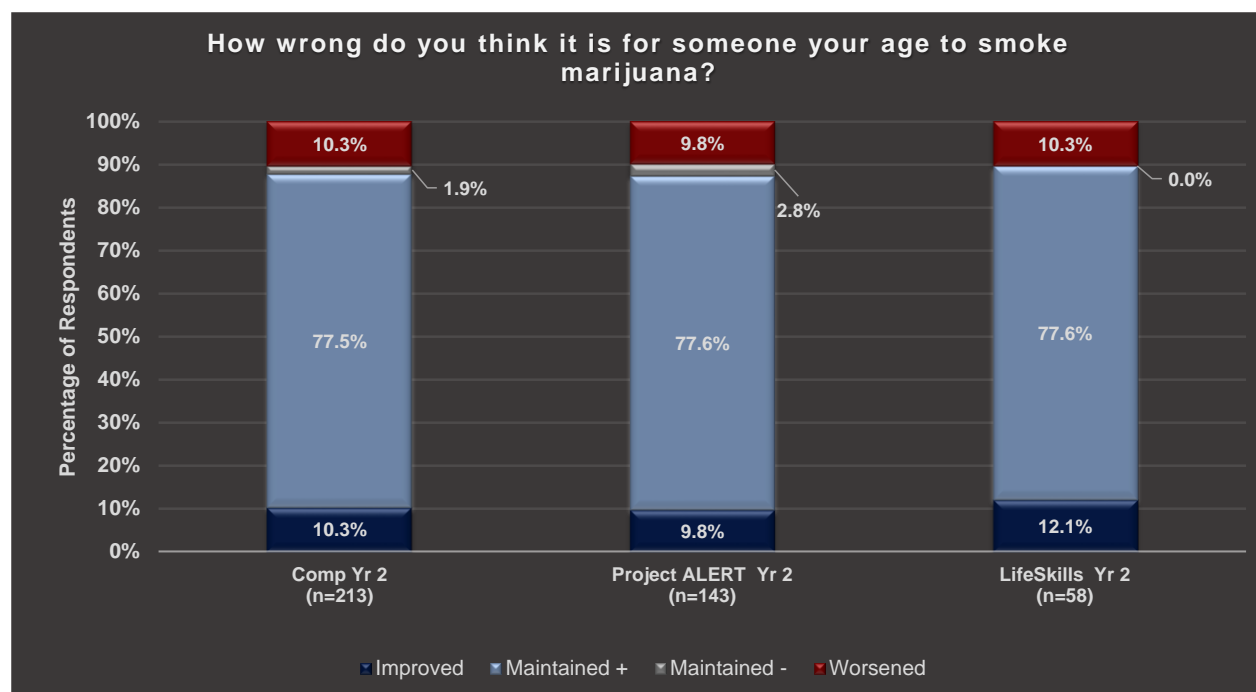
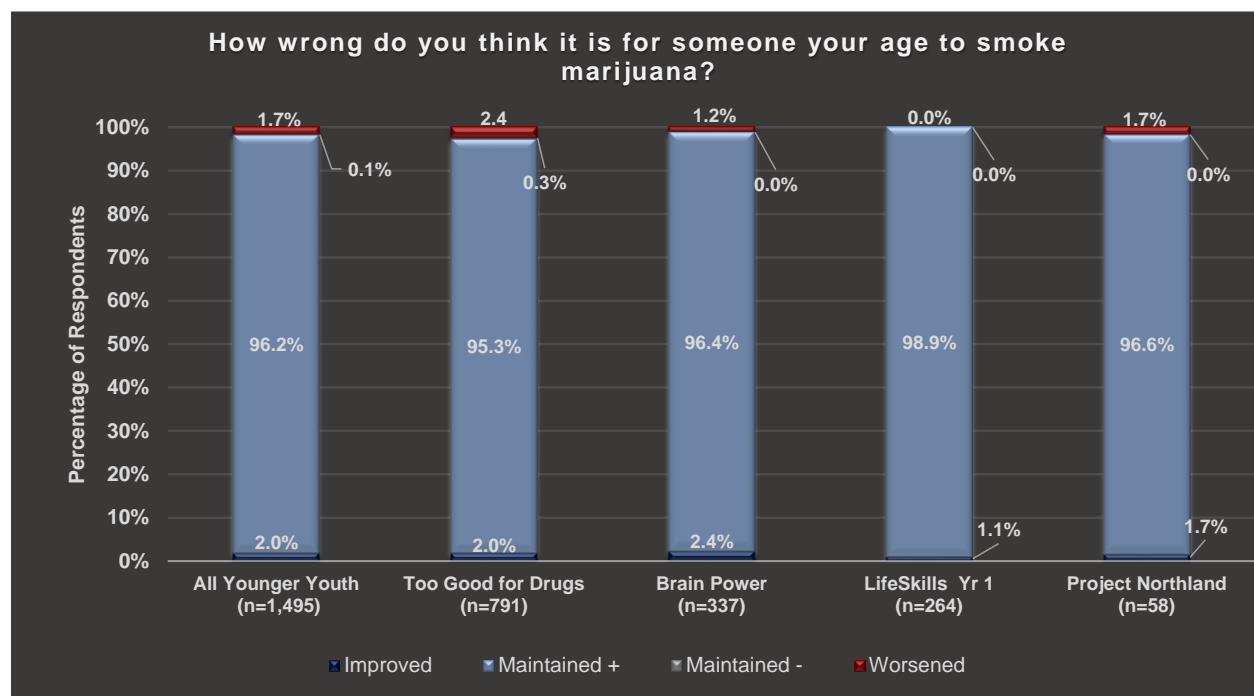


Figure 9: Change in Attitudes Toward Marijuana Use by Program: Elementary School Youth in Single Year and Year One of Multi-Year Programs



Perceived Risk of Harm from Substance Use

Figures 10 through 18 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 programs serving middle and high school students are provided first, followed by data for programs serving elementary school youth. The elementary school youth group contains some 6th graders, although all YY completed the YY survey. Programs are grouped according to program duration (single-year/year one of multi-year, and year two of multi-year programs). Multi-year program data present individual years of the program and therefore are not indicative of how the complete program performs. 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. Desired outcomes for these questions are improvement in (“improved”) or positive maintenance (“maintained +”) of perceived risk toward substance use. In Figures 10 through 18, a positive outcome is the percent improved plus the percent maintained +.

Perceived Risk of Harm from Alcohol Use

Figure 10: Change in Perceived Risk of Harm from Alcohol Use by Program: Middle and High School Youth in Single Year and Year One of Multi-Year Programs

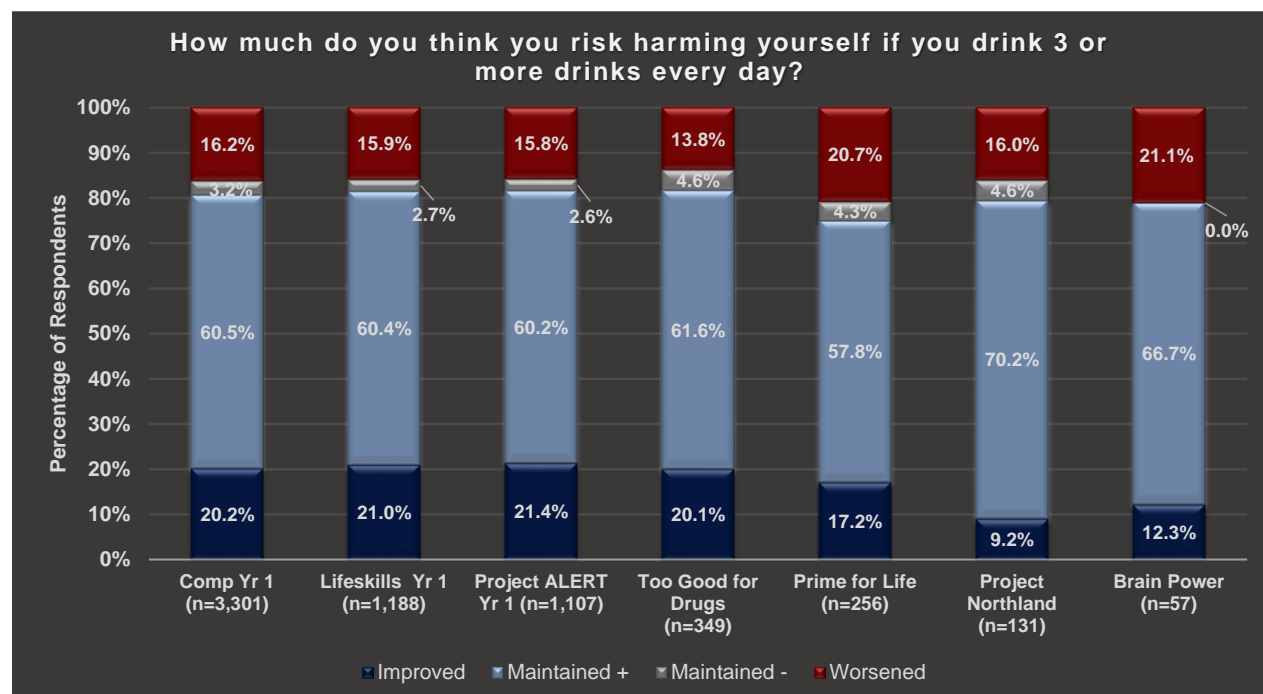


Figure 11: Change in Perceived Risk of Harm from Alcohol Use by Program: Middle and High School Youth in Year Two of Multi-Year Programs

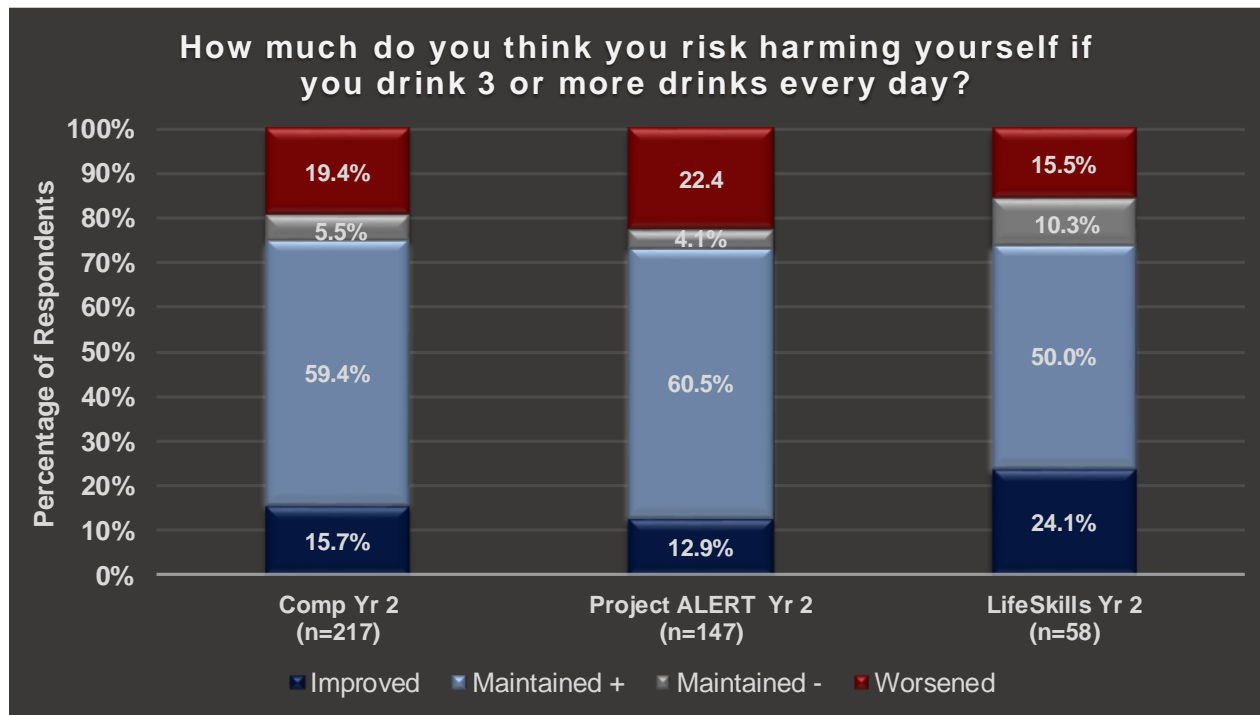
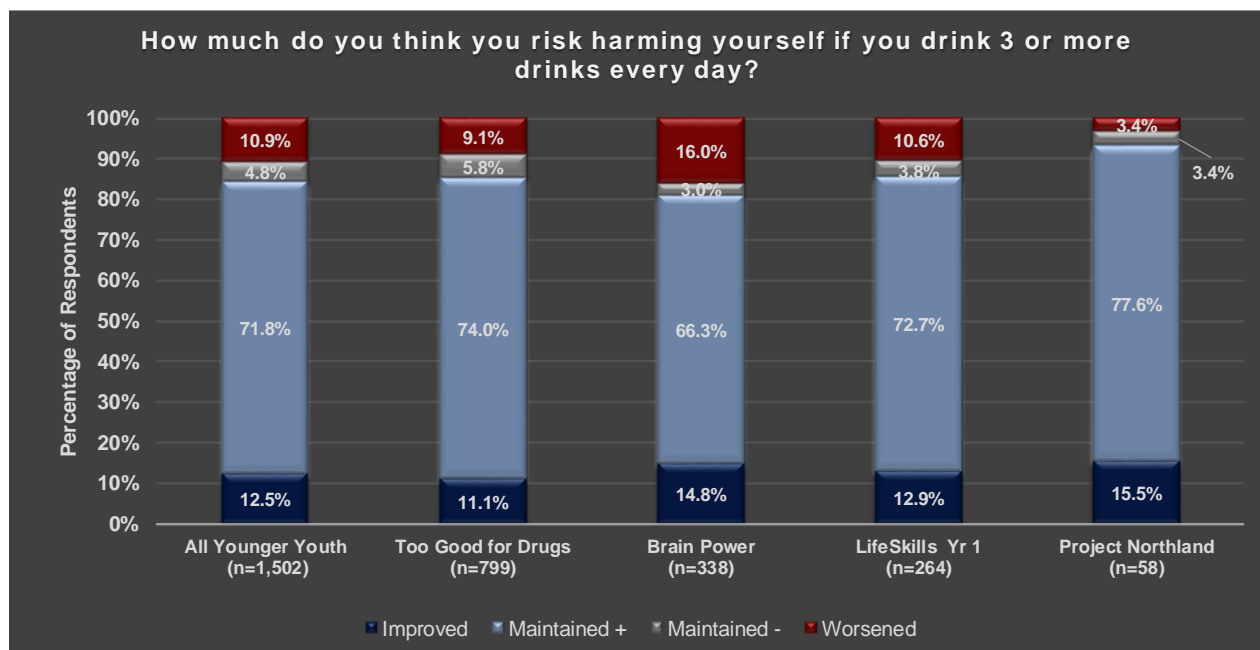


Figure 12: Change in Perceived Risk of Harm from Alcohol Use by Program: Elementary School Youth in Single Year and Year One of Multi-Year Programs



Perceived Risk of Harm from Cigarette Use

Figure 13: Change in Perceived Risk of Harm from Cigarette Use by Program: Middle and High School Youth in Single Year and Year One of Multi-Year Programs

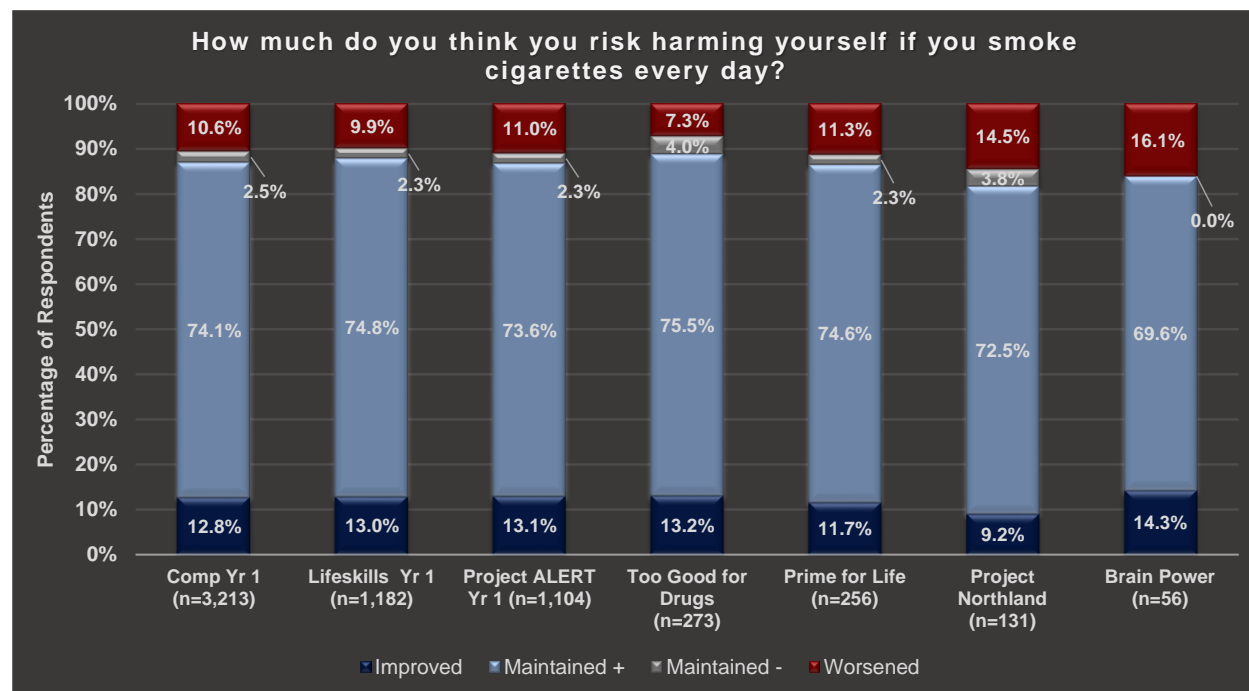


Figure 14: Change in Perceived Risk of Harm from Cigarette Use by Program: Middle and High School Youth in Year Two of Multi-Year Programs

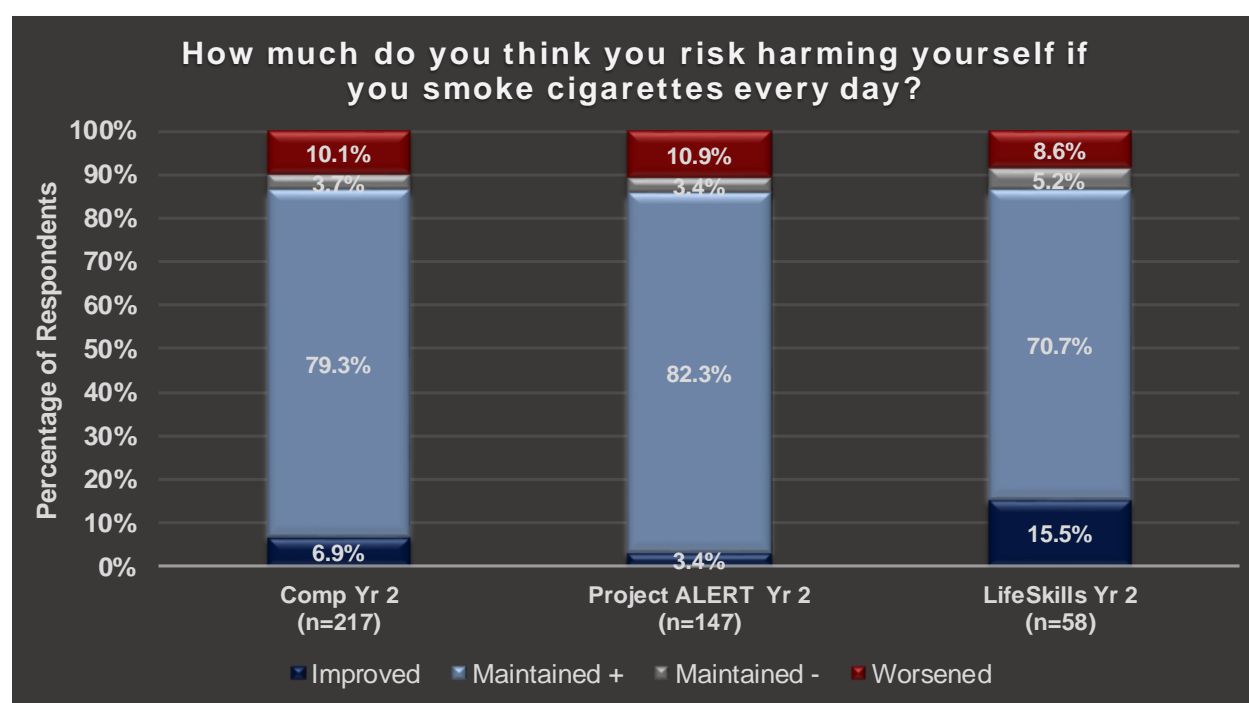
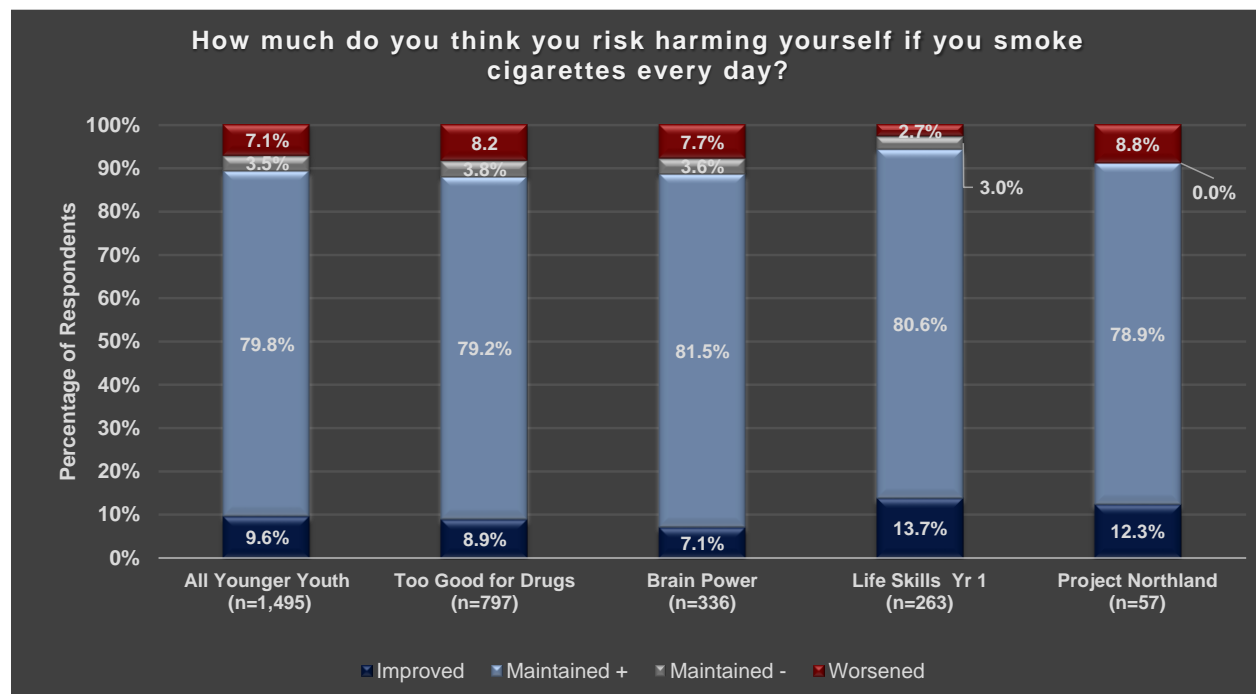


Figure 15: Change in Perceived Risk of Harm from Cigarette Use by Program: Elementary School Youth in Single Year and Year One of Multi-Year Programs



Perceived Risk of Harm from Marijuana Use

Figure 16: Change in Perceived Risk of Harm from Marijuana Use by Program: Middle and High School Youth in Single Year and Year One of Multi-Year Programs

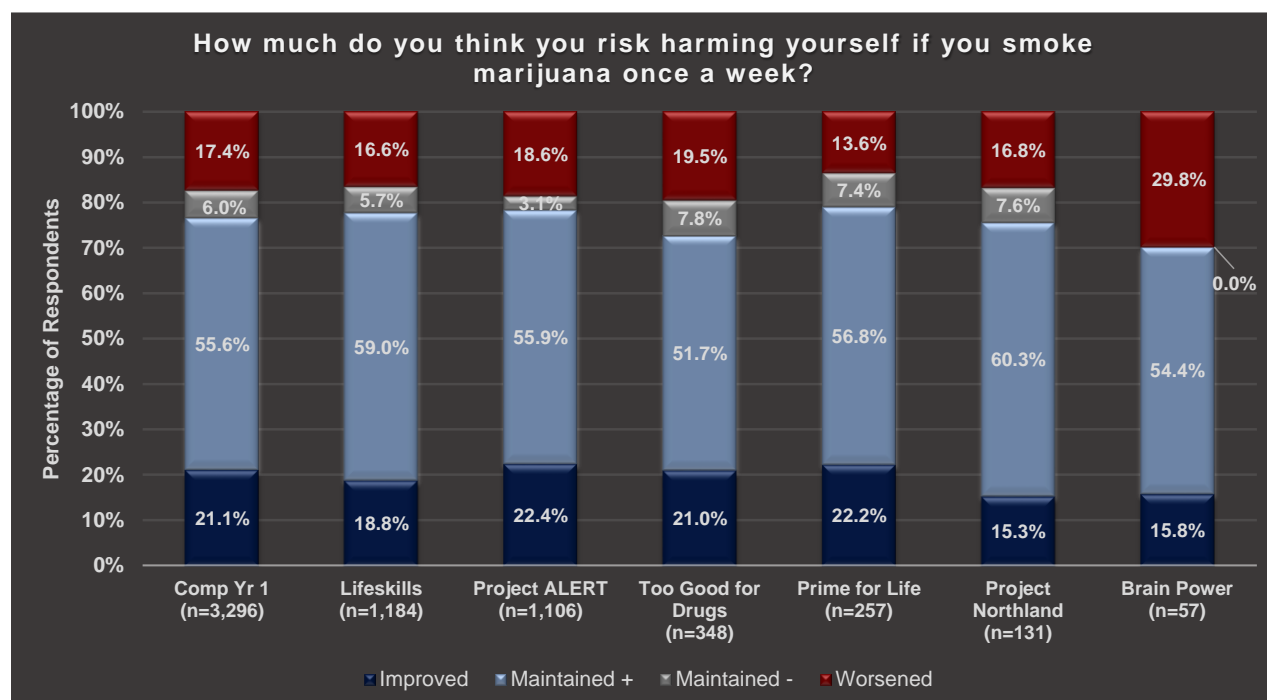


Figure 17: Change in Perceived Risk of Harm from Marijuana Use by Program: Middle and High School Youth in Year Two of Multi-Year Programs

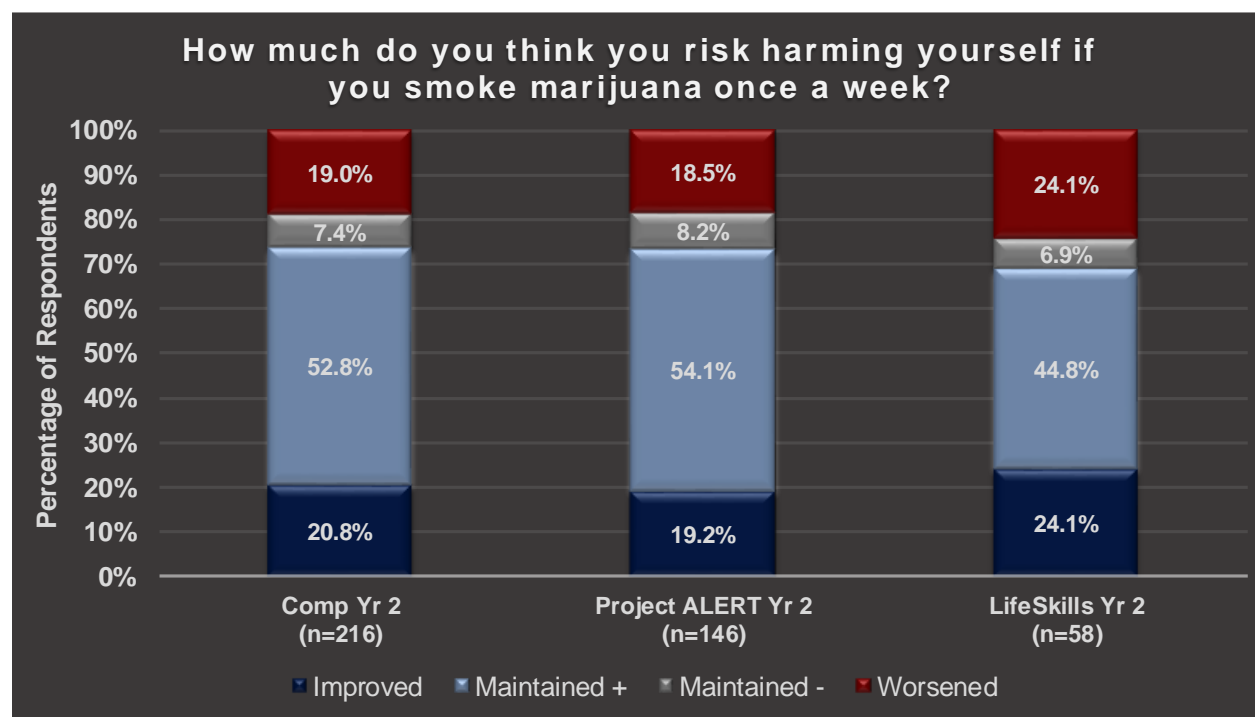
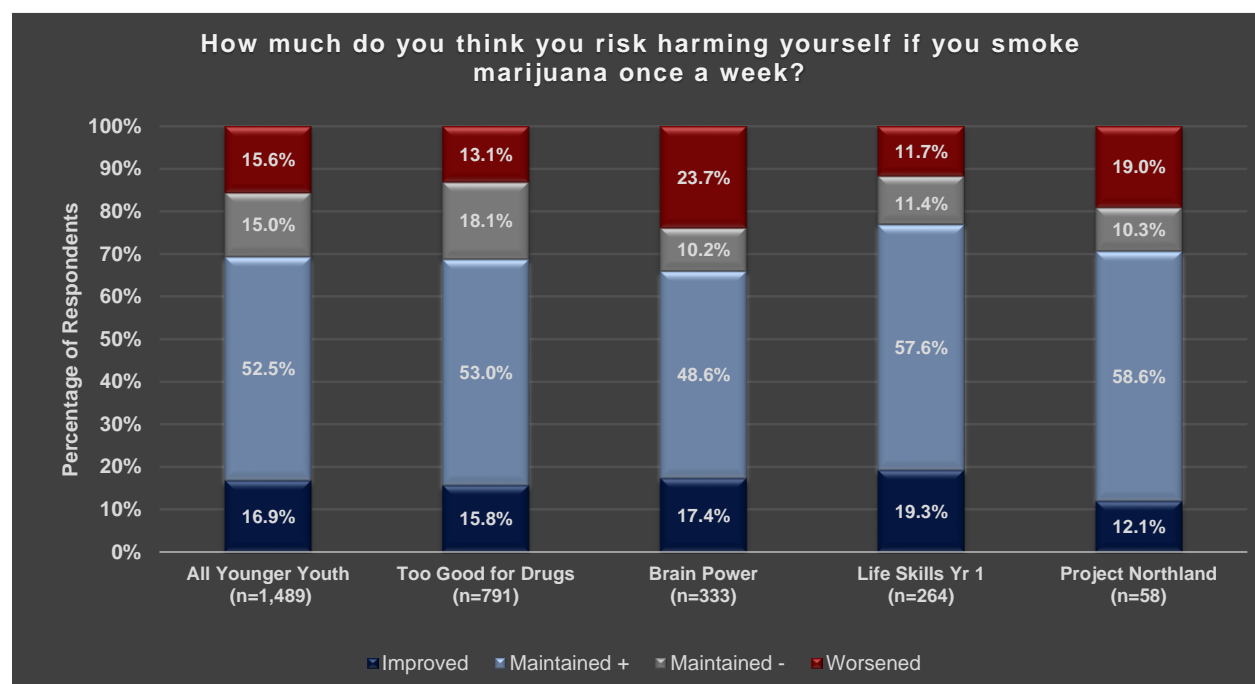


Figure 18: Change in Perceived Risk of Harm from Marijuana Use by Program: Elementary School Youth in Single Year and Year One of Multi-Year Programs



Diversion Program Outcomes

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 primary prevention programs. Diversion programs also tend to be shorter in duration than other prevention programs, and usually span fewer than 30 days. The Comprehensive Prevention Survey instrument now accounts for such short programs by asking at the post-test if participants have used in the past 30 days or since the beginning of the prevention program, whichever is the shorter timeframe. 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 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. Seventy-seven 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 3 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 are also provided.

Table 3: 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	55,116	13	–	+5.33	–	+3.70	–	+1.67	–	+2.70
Diversion	77	17	37.66	-5.19	24.68	+5.19	14.29	-2.56	14.47	-5.26
<i>Note: IYS entries indicate the yearly average change in 30-day use between all Iowa students in grades 8th through 11th. These grades were chosen based on the median age of Diversion participants. Data are from the 2016 Iowa Youth Survey, State of Iowa report (Alcohol from question B16, Binge Drinking from B17, Cigarettes from B34, and Marijuana from B40). The total number of 8th graders was 29,135 and the total number of 11th graders was 25,981. The median age of 8th graders was 13 and 11th graders was 16.</i>										

There was no statistical evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for Diversion 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.

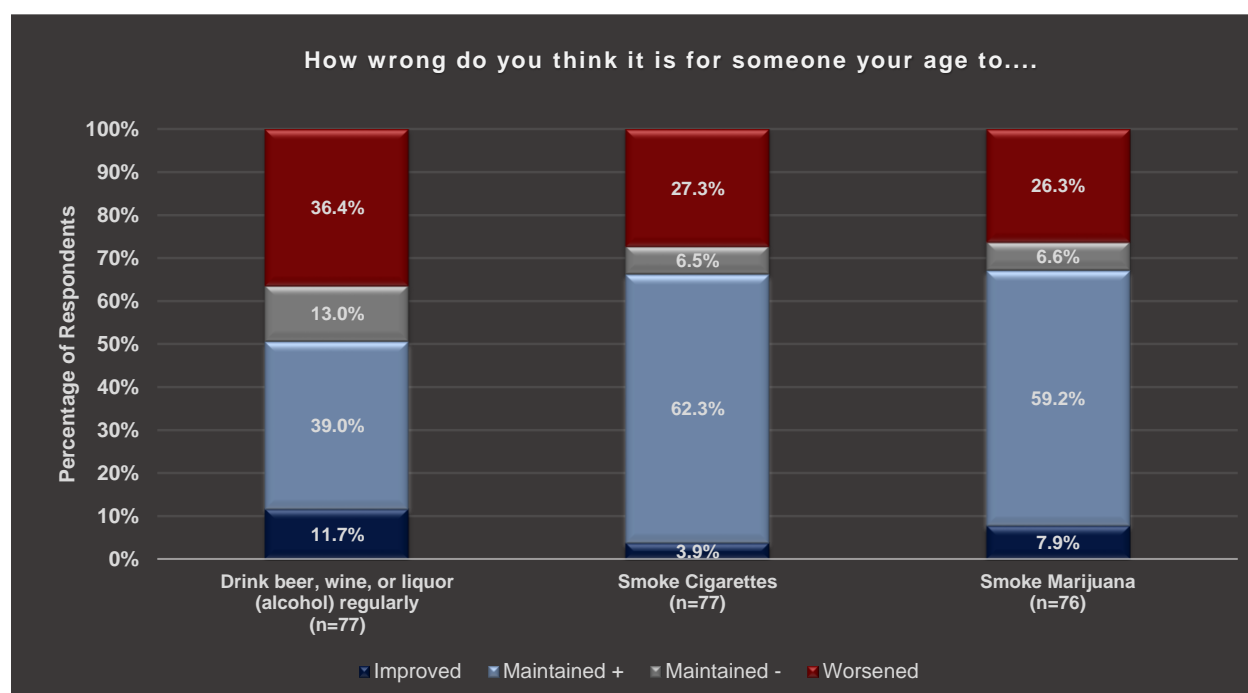
Attitudes Toward Substance Use

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.

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. Desired outcomes for these questions are improvement in (“improved”) or positive maintenance (“maintained +”) of attitudes toward substance use. Figure 19 presents 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 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.

Figure 19: Change in Attitudes Toward Substance Use: Diversion Program



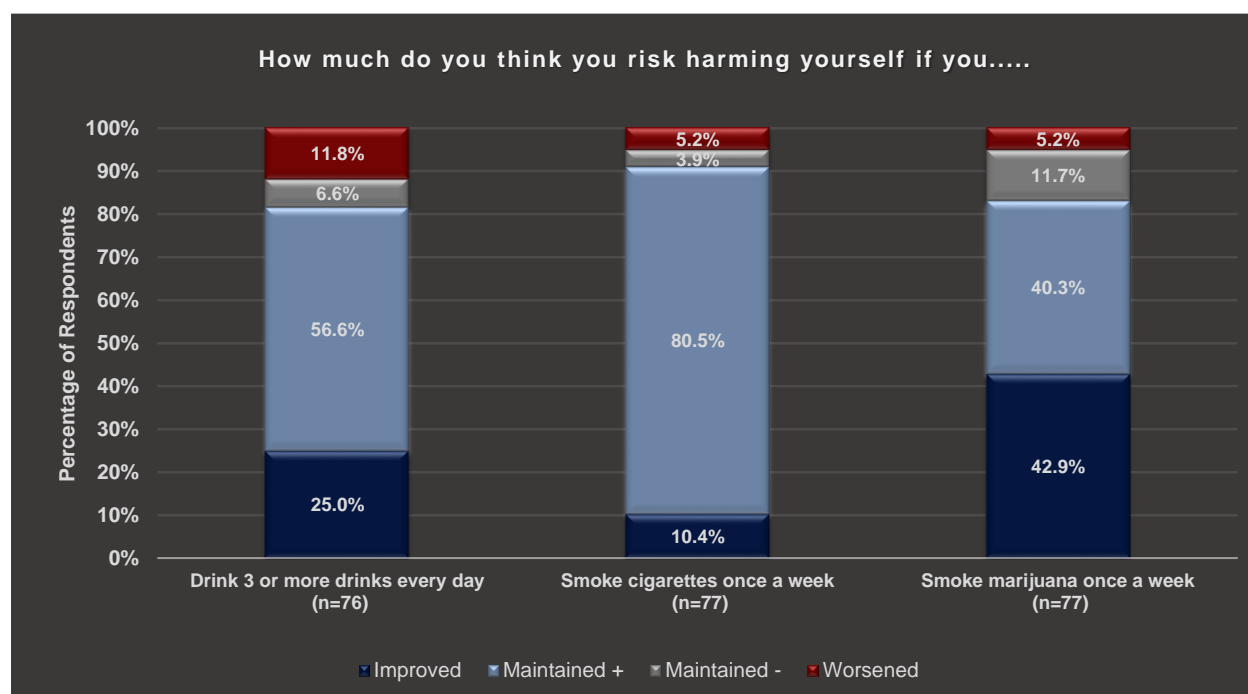
Perceived Risk of Harm from Substance Use

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. Desired outcomes for these questions are improvement in ("improved") or positive maintenance ("maintained +") perceived risk toward substance use. Figure 20 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 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.

Figure 20: Change in Perceived Risk of Harm from Substance Use: Diversion Program



CONCLUSION

Project Evaluation Questions

- ***Has alcohol/tobacco/marijuana usage changed in the target population?***
- ***Answer: Yes, for Comprehensive Prevention combined***

There was a statistically significant increase from pre-test to post-test in alcohol use for Comprehensive Prevention participants (excluding Diversion program participants) and the year one LifeSkills Training group. There was no evidence of change from pre-test to post-test for binge drinking, cigarette, or marijuana use in the combined middle school and high school Comprehensive Prevention participant group or individual program groups. There was no evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for Diversion. However, no change also means that use of those showed no evidence of increasing as would be expected due to maturation.

- ***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)?***
- ***Answer: Yes***

Tables 4, 5, and 6 present positive outcome percentages for attitudes toward alcohol, cigarettes, and marijuana use for all Comprehensive Prevention participants in each program level and by individual programs. Eighty-five percent or more of participants across all regular programs (excluding Diversion) maintained or increased positive attitudes regarding substance use (maintained a response from pre-test to post-test that use is “wrong” or “very wrong”). Ninety-five percent or more of Younger Youth participants maintained or increased positive attitudes, and 50.7% or more of Diversion participants maintained or increased positive attitudes. In all groups, the percentage of students who believe regular cigarette and marijuana use is wrong is higher than the percentage of students who believe regular alcohol use is wrong. In all groups except year two middle and high school youth, the percentage of participants who believe marijuana use is wrong is higher than alcohol and cigarettes.

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

Average Positive Outcome Percentages for Attitudes Toward Substance Use			
Participant Group	Alcohol	Cigarettes	Marijuana
Middle and High School Youth in Single-Year and Year One Programs	85.0%	89.4%	90.3%
Middle and High School Youth in Year Two of Multi-Year Programs	85.7%	92.2%	87.8%
Elementary School Youth in Single-Year and Year One Programs	95.3%	97.4%	98.2%
Diversion	50.7%	66.2%	67.1%

Table 5: Positive Outcome Percentages for Attitudes Toward Substance Use by Regular Programs

Average Positive Outcome Percentages for Attitudes Toward Substance Use			
Regular Programs	Alcohol	Cigarettes	Marijuana
LifeSkills - Year 1	85.6%	90.0%	91.4%
LifeSkills – Year 2	81.0%	89.4%	89.7%
Project ALERT - Year 1	87.6%	91.5%	93.7%
Project ALERT - Year 2	86.4%	93.9%	87.4%
Too Good for Drugs	83.3%	90.0%	89.5%
Prime for Life	77.7%	82.5%	80.0%
Project Northland	90.9%	91.6%	95.5%
Brain Power	81.0%	93.0%	92.8%

Table 6: Positive Outcome Percentages for Attitudes Toward Substance Use by Younger Youth Programs

Average Positive Outcome Percentages for Attitudes Toward Substance Use			
Younger Youth Programs	Alcohol	Cigarettes	Marijuana
Too Good for Drugs	94.0%	96.4%	97.3%
Brain Power	97.1%	98.2%	98.8%
LifeSkills – Year 1	97.7%	98.8%	100%
Project Northland	94.9%	98.3%	98.3%

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

Tables 7, 8, and 9 present positive outcome percentages for perceived risk toward alcohol, cigarettes, and marijuana use for all Comprehensive Prevention participants in each program level and by individual programs. More than 73.6% of participants across all regular programs (excluding Diversion) maintained or increased their perception of risk regarding substance use (maintained a response from pre-test to post-test that use poses “moderate risk” or “great risk”). More than 69.4% of Younger Youth participants maintained or increased their perception of risk, and at least 81.6% of Diversion participants maintained or increased their perception of risk. In all groups combined (excluding Diversion), a higher percentage of participants believe regular marijuana use is less risky than the percentage of participants who believe that regular use of alcohol and cigarettes are risky. Diversion has a higher percentage of youth who believe alcohol is less risky than marijuana. All groups have a higher percentage of youth who believe that cigarette use is riskier than alcohol or marijuana use.

It is noteworthy that 43% of Diversion participants moved up the scale (further toward “great risk”) for marijuana use and 25% moved up the scale for alcohol use.

Table 7: Positive Outcome Percentages for Perceived Risk of Harm from Substance Use by School Group

Average Positive Outcome Percentages for Perceived Risk Toward Substance Use			
Participant Group	Alcohol	Cigarettes	Marijuana
Middle and High School Youth in Single-Year and Year One Programs	80.7%	86.8%	76.5%
Middle and High School Youth in Year Two of Multi-Year Programs	75.1%	86.2%	73.6%
Elementary School Youth in Single-Year and Year One Programs	84.3%	89.4%	69.4%
Diversion	81.6%	90.9%	83.2%

Table 8: Positive Outcome Percentages for Perceived Risk of Harm from Substance Use by Regular Programs

Average Positive Outcome Percentages for Perceived Risk Toward Substance Use			
Program	Alcohol	Cigarettes	Marijuana
LifeSkills - Year 1	81.4%	87.8%	77.8%
LifeSkills – Year 2	74.1%	86.2%	68.9%
Project ALERT - Year 1	81.6%	86.7%	78.3%
Project ALERT – Year 2	73.4%	85.7%	73.3%
Too Good for Drugs	81.7%	88.7%	72.7%
Prime for Life	75.0%	86.3%	79.0%
Project Northland	79.4%	81.7%	75.6%
Brain Power	79.0%	83.9%	70.2%

Table 9: Positive Outcome Percentages for Perceived Risk of Harm from Substance Use by Younger Youth Programs

Average Positive Outcome Percentages for Perceived Risk Toward Substance Use			
Younger Youth Programs	Alcohol	Cigarettes	Marijuana
Too Good for Drugs	85.1%	88.1%	68.8%
Brain Power	81.1%	88.6%	66.0%
LifeSkills – Year 1	85.6%	94.3%	76.9%
Project Northland	93.1%	91.2%	70.7%

Considering positive attitude outcomes for all first year regular programming, Project Northland has the highest percentage of students who believe alcohol and marijuana are wrong, while Brain Power has the highest percentage of students who believe cigarettes are wrong. For all YY programming, LifeSkills has the highest percentage of students who believe alcohol, cigarettes, and marijuana are wrong.

Considering perceived risk of harm for all first year regular programming, Too Good for Drugs has the highest percentage of students who perceive alcohol and cigarettes as risky, while

Prime for Life has the highest percentage of students who perceive marijuana as risky. For all YY programming, LifeSkills has the highest percentage of students who perceive cigarettes and marijuana as risky, while Project Northland has the highest percentage of students who perceive alcohol as less risky.

It is noteworthy that Diversion program participants think alcohol, cigarettes, and marijuana are more risky than wrong. As opposed to the findings of regular and YY programming (with the exception of Brain Power) that these substances are more wrong than risky.

APPENDIX

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	Families and Schools Together	Selective
	LifeSkills Training	Universal-Direct
	Prime for Life	Universal-Direct and Indicated
	Project Towards No Drug Abuse	Selective
	Curriculum-Based Support Group	Selective
Area Substance Abuse Council, Area 8	Curriculum-Based Support Group	Selective
Center for Alcohol and Drug Services	Too Good for Drugs	Universal-Direct
Community and Family Resources	Prime for Life	Indicated
	Too Good for Drugs	Universal-Direct
Compass Pointe	Diversion (Juvenile Alcohol & Drug Education)	Indicated
	Project Northland	Universal-Direct
	Prime for Life	Universal-Direct
Employee and Family Resources, Area 13	Too Good for Drugs	Universal-Direct
	LifeSkills Training	
Employee and Family Resources, Area 16	Too Good for Drugs	Universal-Direct
	LifeSkills Training	Universal-Direct and Selective
Employee and Family Resources, Area 20	Too Good for Drugs	Universal-Direct
Zion Recovery Area 9	(Data submitted late)	

	(Data submitted late)	
Zion Recovery Area 10	(Data submitted late)	
Helping Services for Youth & Families	(No data submitted this year)	
Jackson Recovery Centers	(No data submitted this year)	
Prelude Behavioral Services	LifeSkills Training	Universal-Direct
New Opportunities	LifeSkills Training	Universal-Direct
Pathways Behavioral Services, Inc.	LifeSkills Training	Universal-Direct
	Strengthening Families Program	Selective
Prairie Ridge Integrated Behavioral Healthcare	Diversion (Prime for Life)	Selective and Indicated
Southern Iowa Economic Development Association	Brain Power	Universal-Direct
Substance Abuse Services for Clayton County, Inc.	All Stars	Universal-Direct
Substance Abuse Treatment Unit of Central Iowa	Juvenile Education Groups	Indicated
New Horizons	LifeSkills Training	Universal-Direct
	Project ALERT	
	Project Towards No Drug Abuse	Indicated
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