

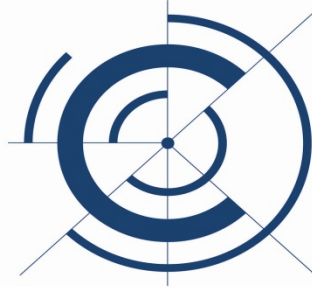


Youth Development Program

THE IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

**Annual Outcome Evaluation Report
July 2013 – June 2014**

With Funds Provided By:
Iowa Department of Public Health,
Division of Behavioral Health,
Bureau of Substance Abuse



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

Youth Development Annual Outcome Evaluation Report July 2013- June 2014

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Citation of references related to this report is appreciated. Suggested citation:

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

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INTRODUCTION

Project Overview

The Iowa Department of Public Health (IDPH) provides funding for prevention services through the project known as Youth Development. The purpose of the Youth Development (YD) project is to provide evidence-based substance abuse prevention programming for youth ages 5 through 18 that includes in- and out-of-school opportunities for youth development, character development, and youth leadership. Eight substance abuse prevention organizations participate in this project: Area Substance Abuse Council; Henry County Extension; Garner-Hayfield Community School District; Mason City Youth Task Force; Substance Abuse Treatment Unit of Central Iowa; Promise Partners; United Action for Youth; and Kossuth Connections. The Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) conducts the evaluation of the Youth Development project for the Iowa Department of Public Health.

Evaluation Design

The evaluation employs a matched pre-post design whereby a survey is administered at the beginning and at the conclusion of the prevention program. The post-test survey is administered after each year of programming for programs spanning multiple years. For those programs, participants' post-tests from the previous program year are matched with their post-tests from the current year to provide current year outcomes data; i.e., the previous year's post-test data are used as a baseline for the current year. Agency staff collect these data and enter them into Database Builder, an online database. The Consortium then downloads the data for analyses and reporting.

A total of 278 pre-tests, 245 first-year post-tests, 139 second-year post-tests, and 394 third-year post-tests were collected for the Youth Development project in State Fiscal Year 2014. The matching of pre-tests and baseline post-tests to the appropriate current year post-tests resulted in a total of 660 survey matches for analysis. Of those, 229 matches were for participants in single-year programs or in the first year of multi-year programs; 109 were for participants in the second year of multi-year programs, and 322 were for participants in the third year of multi-year programs.

The pre-post data were used to help answer the following evaluation questions:

- Has alcohol/cigarette/marijuana usage changed in the target population?
- Has the percentage of the target population who indicate positive attitudes at baseline (pre-test) maintained or increased after the intervention (post-test)?
- Has perceived risk of harm from alcohol/cigarette/marijuana use maintained a positive response or increased from pre-test to post-test?



OUTCOMES

Demographics

The median age of Youth Development project participants at post-test was 12 years of age. The majority of the participants (89.8%) were in the sixth or seventh grade. The sex of participants was split almost equally (49.9% male, 50.1% female). Nearly one-fifth of participants were Hispanic or Latino. Participant racial groups are delineated below:

- 82.0% White;
- 1.9% Asian;
- 1.1% Black/African American;
- 1.1% American Indian/Alaska Native;
- 0.6% Native Hawaiian/Other Pacific Islander;
- 6.5% Some other race; and
- 6.8% More than one race.

Changes from Pre-test to Post-test

The table and figures on pages 4 through 10 detail data pertaining to past 30-day use, attitudes toward use, and perceptions of risk of harm from use of alcohol, cigarettes, and marijuana. Results are provided for the project (all Youth Development participants together) and for the following individual programs implemented in the project: LifeSkills Training, Project ALERT, and All Stars. The LifeSkills Training data include participants in all curriculum years of the program, combined. Other programs that did not meet the minimum sample size (i.e., 50 matched surveys) necessary for individual reporting are Leadership and Resiliency Program and Positive Action. Data for participants of these programs are included in the Youth Development project totals.

An attrition analysis was performed on the data to identify potential differences between participants who completed the program and participants who dropped out of the program or did not complete a post-test. Seven percent of those starting the program did not complete a post-test and are considered attrition cases. Although this is a relatively low attrition rate, there were significant differences in age (Cochran-Mantel-Haenszel Test, $p=0.0141$) and grade (Cochran-Mantel-Haenszel Test, $p=0.0032$) between the attrition group and those who completed the post-test. Participants ages 11, 14 through 16, and 18 were more likely to attrite than participants of other ages. Half of the 15, 16, and 18 year-old participants dropped out of the program or did not complete a post-test. In examining grade, students in grades 6, 9, and 10 were more likely to attrite than those in other grades. Sixth graders comprise two-thirds (66.0%) of all the attrition cases. Although the total numbers of 9th and 10th grade participants was small, half of them dropped out or failed to complete a post-test. Therefore, the participants represented by the outcome data presented in this report differ in grade and age from those who initiated the program. This selective attrition should be taken into consideration when interpreting outcomes.

Iowa Youth Survey (IYS) data are provided as a reference point for interpreting the substance use outcome data in this report. The Iowa Youth Survey is a biennial census assessment of Iowa students' attitudes and behaviors, including attitudes toward substance use and actual use



of substances. Students in grades 6, 8, and 11 complete the IYS. The 2012 IYS data included provide an estimate of the change one might expect to see each year in Iowa's general youth population due to maturation. Thus, IYS data serve as a general point of reference when examining Youth Development program outcomes, i.e., change from pre-test to post-test, rather than comparing program percentages to zero or no change. It is important to note that youth who participated in Youth Development programming may also have completed the IYS.

Past 30-Day Use

Table 1 on page 4 presents data on past 30-day use of alcohol, cigarettes, marijuana and binge drinking for all Youth Development participants, LifeSkills Training participants, All Stars participants, and Project ALERT participants.

A positive (+) percentage point change indicates an increase in use, whereas a negative (-) change indicates a decrease in use. However, the change values presented in the table do not indicate statistically significant differences from pre-test to post-test. There is no statistical evidence of change from pre-test to post-test for the substance use categories presented (statistical tests yielded p values greater than 0.05). This is true for the Youth Development participant group and the 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 1. Change in past 30-Day Use: Youth Development Total and Results by Program

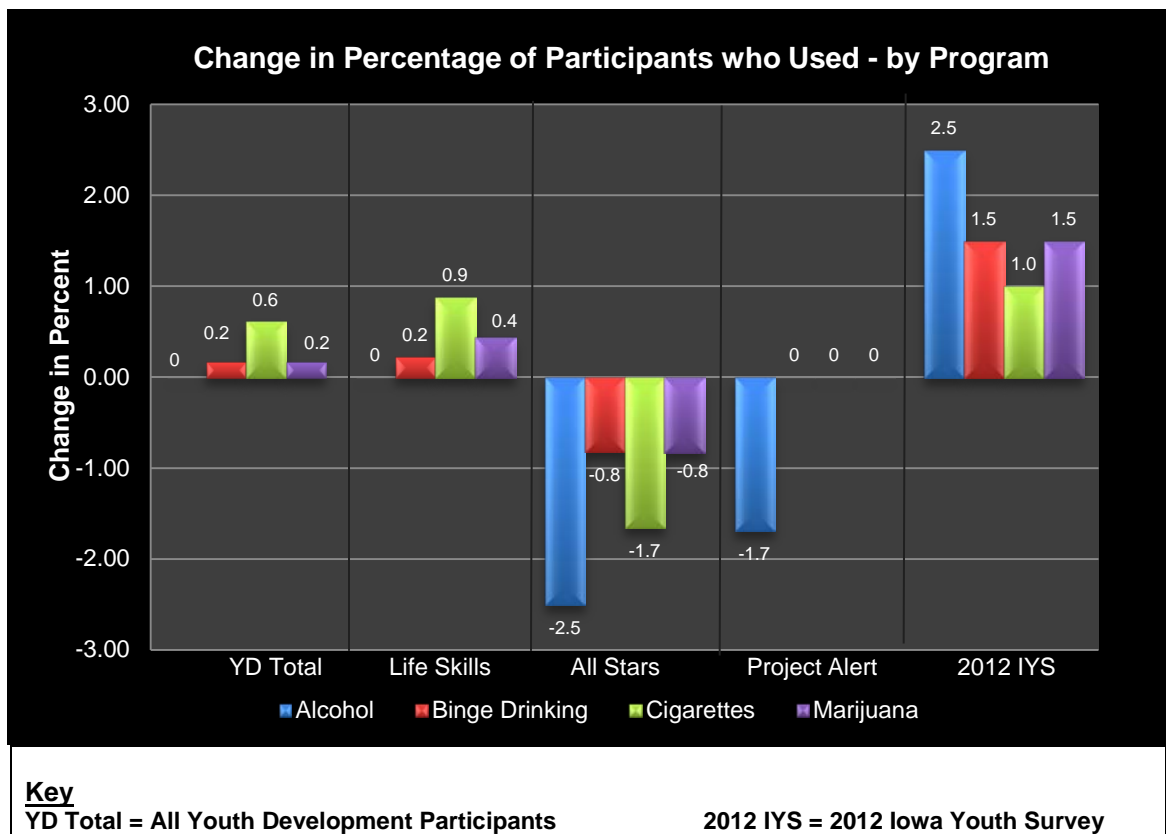
Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test										
Group	N	Median Age	Alcohol		Cigarettes		Marijuana		Binge Drinking	
			Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey ¹	48,464 ²	12	–	+2.50	–	+1.00	–	+1.50	–	+1.50
Youth Development	660	13	5.99	0	0.77	+0.61	0.61	+0.16	0.76	+0.16
Life Skills Training	461	13	7.03	0	0.66	+0.88	0.66	+0.44	0.66	+0.22
All Stars	123	12	5.00	-2.50	1.65	-1.65	0.83	-0.83	1.65	-0.82
Project ALERT	59	13	1.69	-1.69	0	0	0	0	0	0

¹ IYS entries indicate the yearly average change in 30-day use between all Iowa students in grades 6 and 8. The majority of 6th graders completing the IYS were 11 years old; the majority of 8th graders were 13. Data were from the 2012 Iowa Youth Survey, State of Iowa report (Questions B30, Any Tobacco Use from ATOD section, and B31).

²The total number of 6th graders completing the 2012 Iowa Youth Survey was 24,170; the total number of 8th graders was 24,294.

Figure 1: Change in Past 30-Day Use Pre- and Post-test: Youth Development Total and Results by Program

Figure 1 provides the percentage point change in use of participants in all YD Programs.



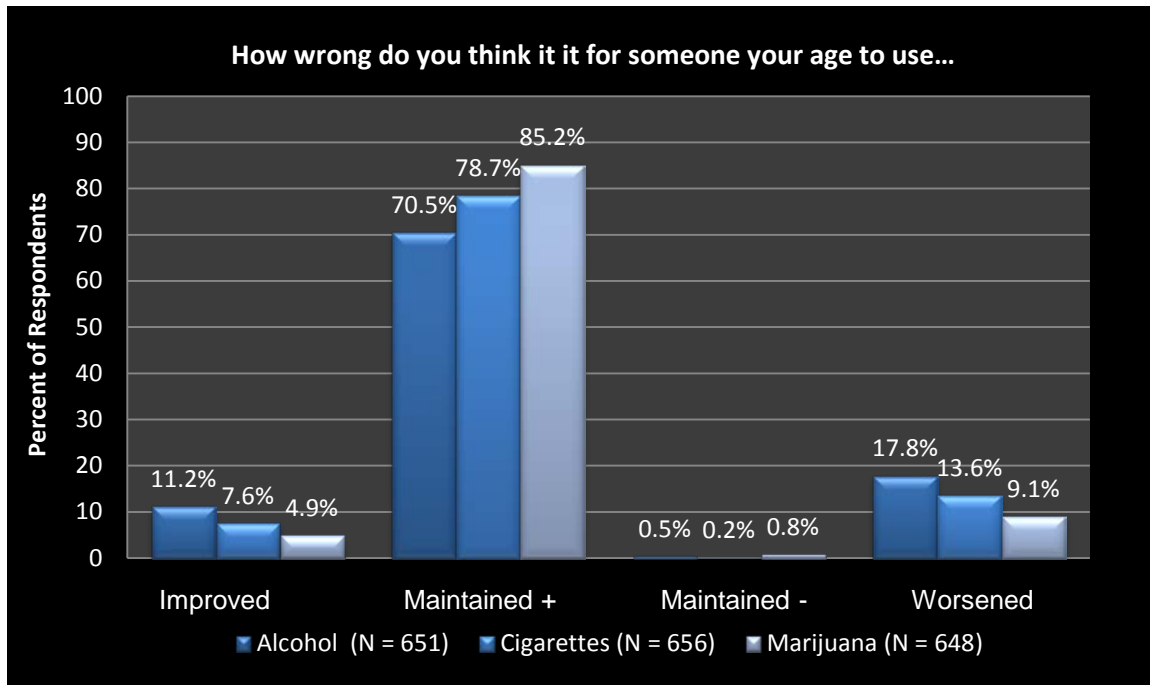
Attitudes Toward Substance Abuse

The figures on pages 6 and 7 show change in individual attitudes from the pre-test to the post-test for alcohol, cigarettes, and marijuana. Individual attitudes either:

- 1) “improved,” which means that attitudes grew more unfavorable toward use of alcohol, cigarettes, or marijuana (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, cigarettes, or marijuana use (a positive outcome);
- 3) “maintained -,” which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarettes, or marijuana use (a negative outcome); or;
- 4) “worsened,” meaning that attitudes grew more favorable toward alcohol, cigarettes, or marijuana use from pre-test to post-test (e.g., respondent felt marijuana use was very wrong at pre-test and a little bit wrong at post-test).

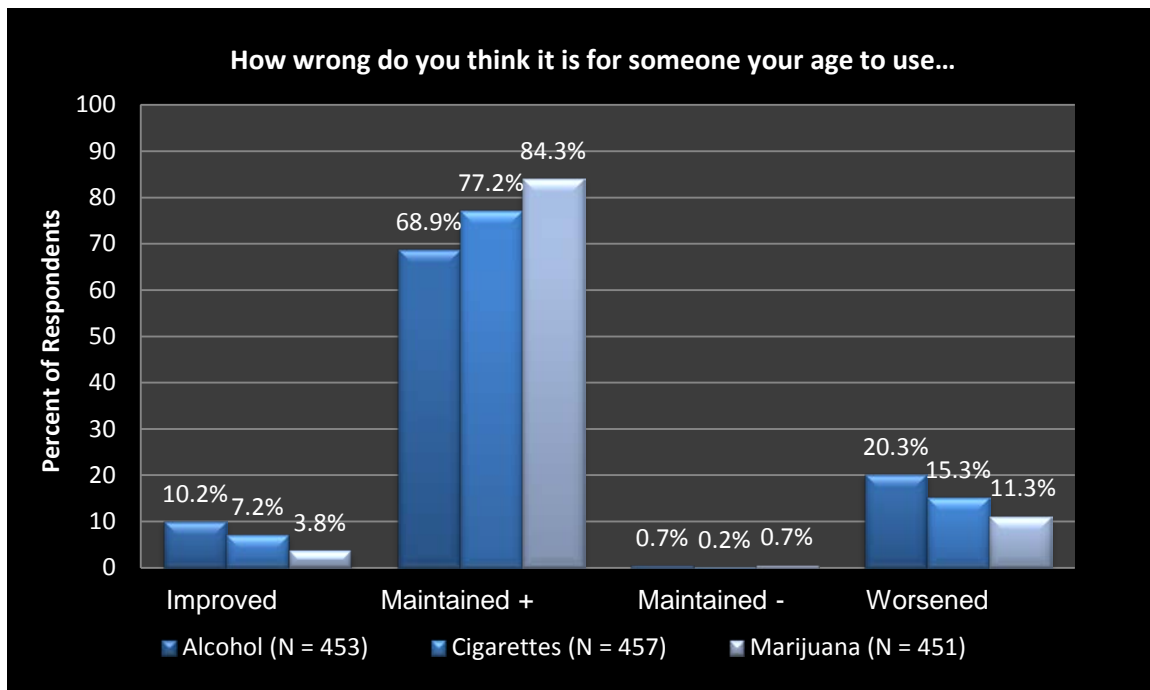
Desired outcomes for these questions are improvement in (“improved”) or positive maintenance (“maintained +”) of attitudes toward substance use. The positive attitude outcome percentages provided below each figure represent participants in the “improved” and “maintained +” categories for that program group. The number of matched pre- and post-tests containing a response to the question is shown at the bottom of the data table, in parentheses, following each substance.

Figure 2: Change in Attitudes Toward Substance Use: Youth Development



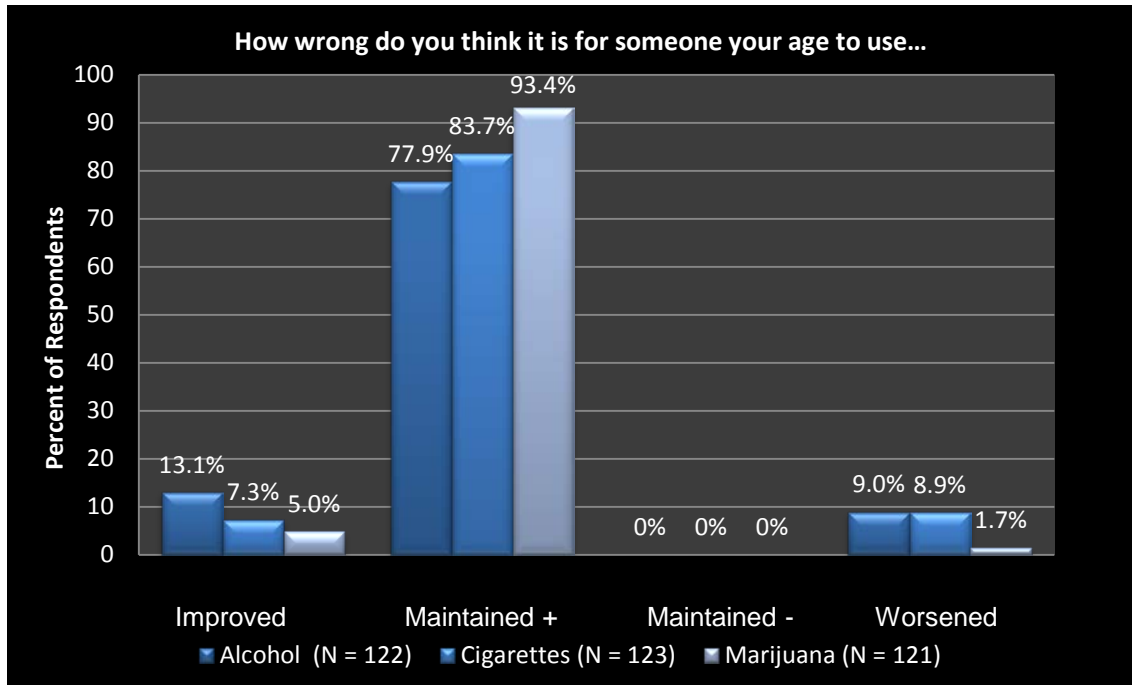
Youth Development project participants' positive attitude outcomes are as follows: Alcohol – 81.7%; Cigarettes – 86.3%; and Marijuana – 90.1%.

Figure 3: Change in Attitudes Toward Substance Use: LifeSkills Training



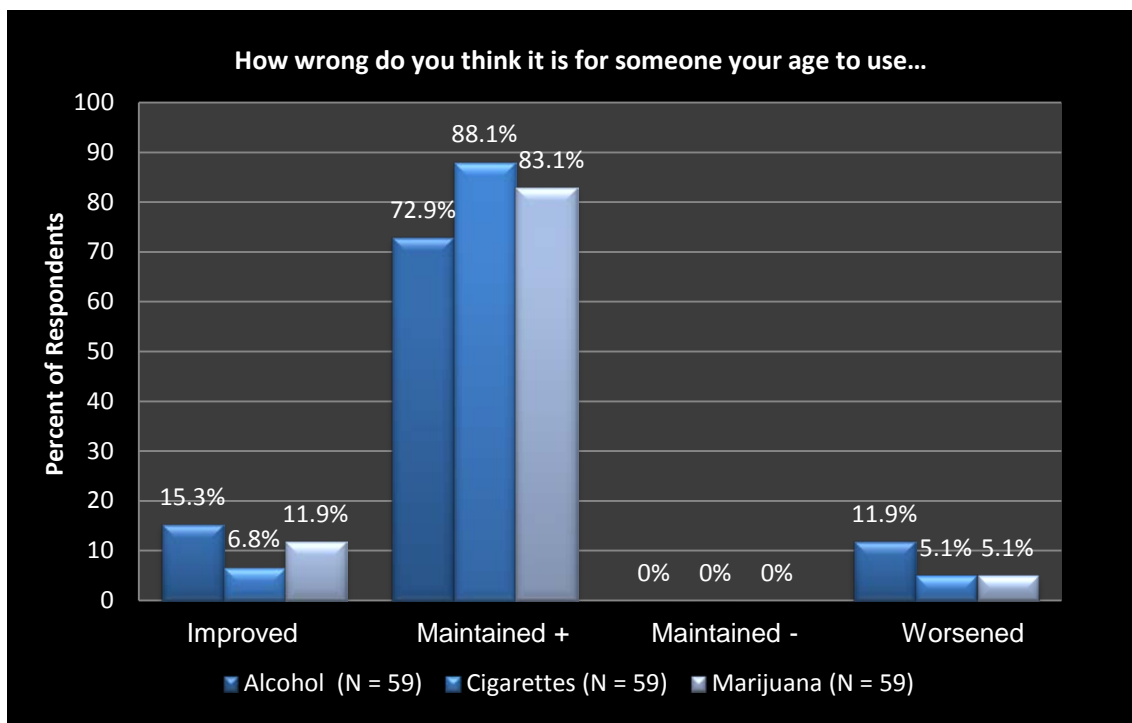
LifeSkills Training participants' positive attitude outcomes are as follows: Alcohol – 79.0%; Cigarettes – 84.5%; and Marijuana – 88.0%.

Figure 4: Change in Attitudes Toward Substance Use: All Stars



All Stars participants' positive attitude outcomes are as follows: Alcohol – 91.0 %; Cigarettes – 91.1 %; and Marijuana – 98.4 %.

Figure 5: Change in Attitudes Toward Substance Use: Project ALERT



Project ALERT participants' positive attitude outcomes are as follows: Alcohol – 88.1%; Cigarettes – 94.9%; and Marijuana – 94.9%.

Perceived Risk of Harm from Substance Use

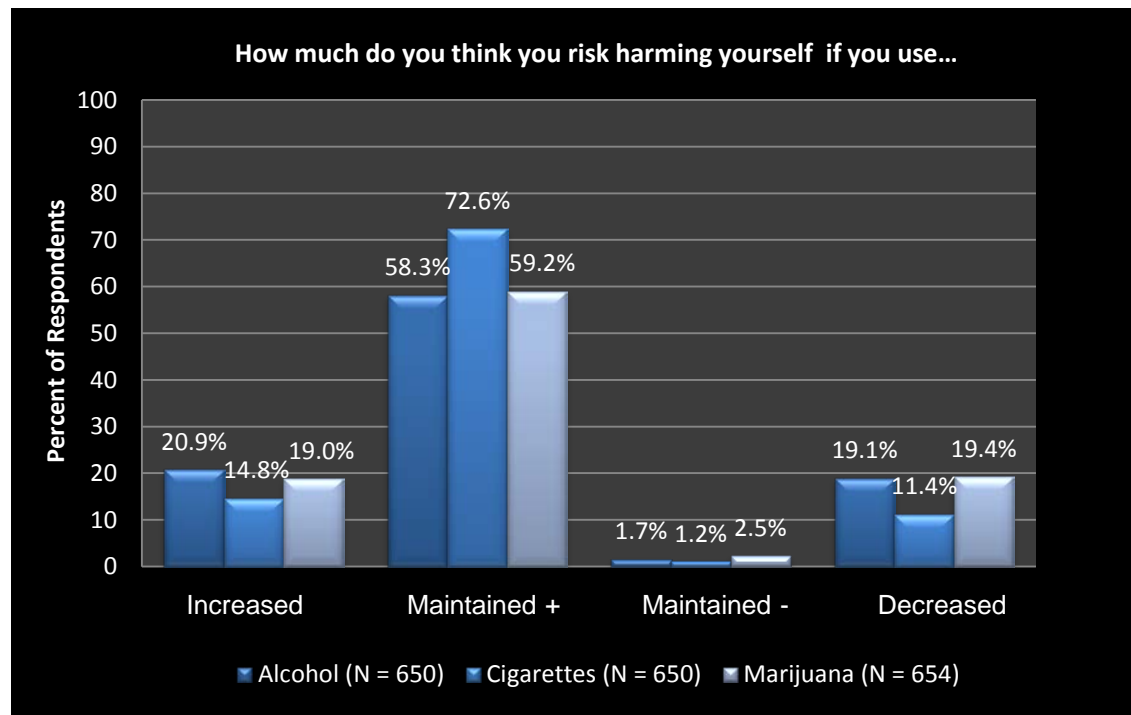
The following figures show change from pre- to post-test in individuals' perceptions of risk of harm from use of alcohol, cigarettes, and marijuana. Perceptions of risk either:

- 1) "increased," which means that their reported perceived risk regarding alcohol, cigarettes, or marijuana use increased from pre-test to post-test (e.g., respondent felt alcohol use was a moderate risk at pre-test and a great risk at post-test);
- 2) "maintained +," which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarettes, or marijuana use (a positive outcome);
- 3) "maintained -," which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarettes, or marijuana use (a negative outcome); or
- 4) "decreased," meaning that their reported perception of risk of harm decreased from pre-test to post-test (e.g., respondent reported that marijuana use posed a moderate risk of harm at pre-test and no risk at post-test).

Desired outcomes for these questions are an increase in or positive maintenance ("maintained +") of change in perceived risk. In Figures 6 through 9, a positive outcome is the percent increased plus the percent maintained +.

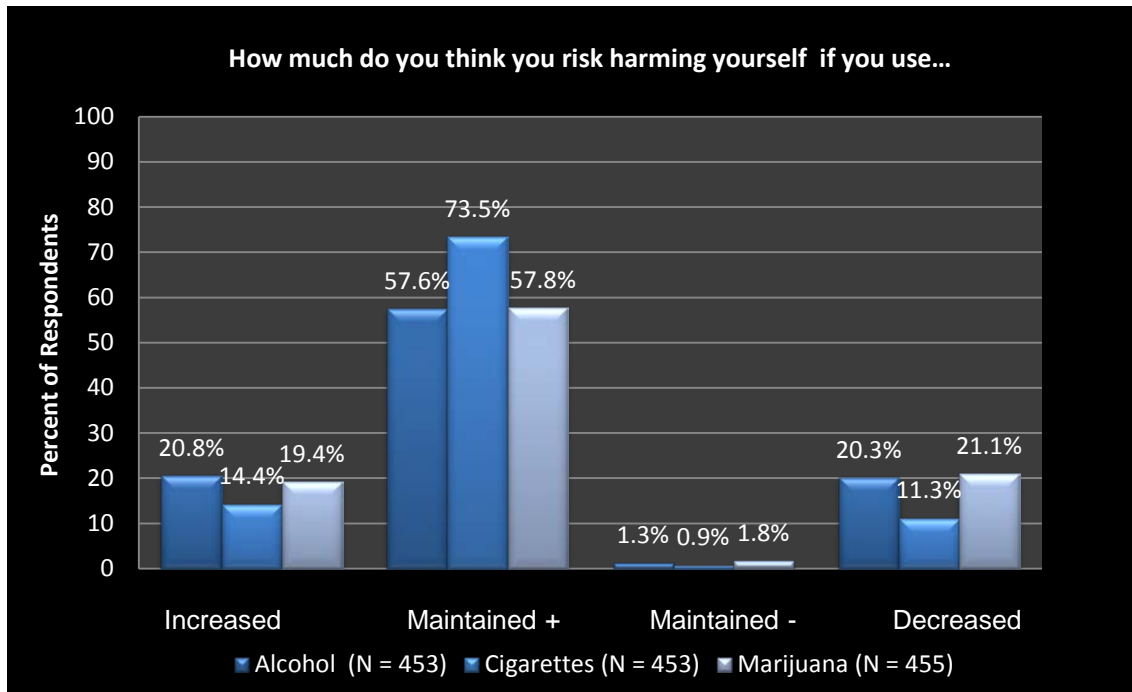
Figures 6 through 9 show data for all Youth Development project participants: LifeSkills Training participants, All Stars participants, and Project ALERT participants, respectively. The positive attitude outcome percentages provided below each figure represent participants in the "improved" and "maintained +" categories for that program group. The number of matched pre- and post-tests containing a response to the question is shown at the bottom of the data table following each substance.

Figure 6: Change in Perceived Risk of Harm: Youth Development



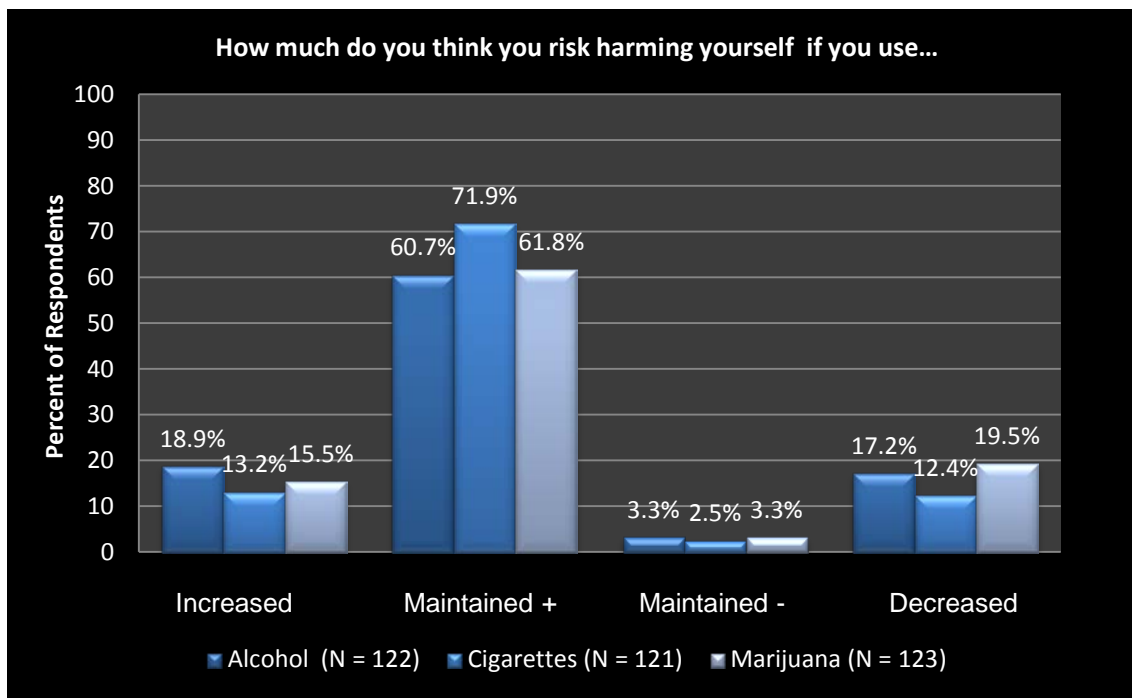
Youth Development project participants' positive perceived risk outcomes are as follows: Alcohol – 79.2%; Cigarettes – 87.4%; and Marijuana – 78.1%.

Figure 7: Change in Perceived Risk of Harm: LifeSkills Training



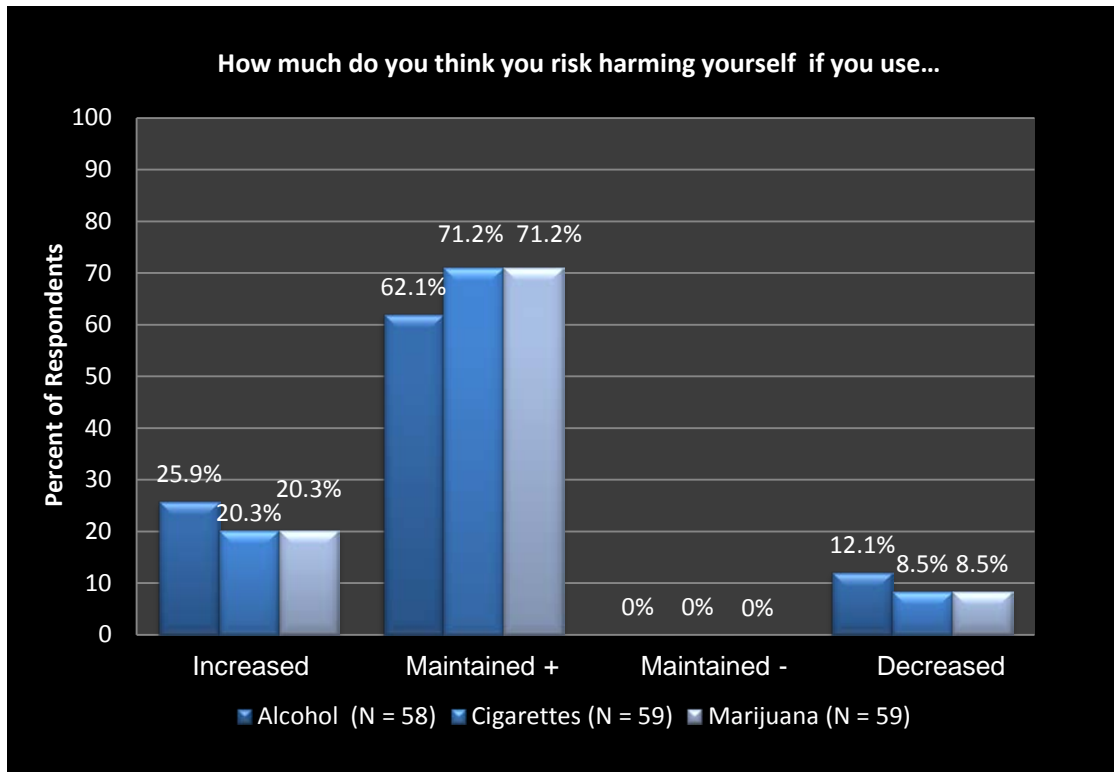
LifeSkills Training participants' positive perceived risk outcomes are as follows: Alcohol – 78.4%; Cigarettes – 87.9%; and Marijuana – 77.1%.

Figure 8: Change of Perceived Risk of Harm: All Stars



All Stars participants' positive perceived risk outcomes are as follows: Alcohol – 79.5%; Cigarettes – 85.1%; and Marijuana – 77.2%.

Figure 9: Change of Perceived Risk of Harm: Project ALERT



Project ALERT participants' positive perceived risk outcomes are as follows: Alcohol – 87.9%; Cigarettes – 91.5%; and Marijuana – 91.5%.

CONCLUSION

The following outcomes should be examined in light of the selective attrition identified in the attrition analysis discussion on page 2. The evaluators recommend that participating agencies explore possible reasons 6th, 9th, and 10th graders are dropping out of programs or failing to complete the post-test at significantly higher rates than other participants.

This evaluation of the Youth Development project answers the following questions:

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

There was no statistically significant change in past 30-day use in Youth Development participants as a whole or for the LifeSkills Training, All Stars or Project ALERT participant groups. However, this means that use of alcohol, cigarettes, and marijuana showed no evidence of increasing as would be expected due to maturation. This suggests that there could be some benefit derived from the programs in deflecting the increases normally seen in adolescents.

- ***Has the percentage of the target population who indicate positive attitudes at baseline (pre-test) maintained or increased after the intervention (post-test)?***

Table 2 below presents positive outcome percentages for attitudes toward alcohol, cigarettes, and marijuana use for all Youth Development participants, LifeSkills Training participants, All Stars participants, and Project ALERT participants. At least 79% of participants across all programs maintained or increased positive attitudes regarding substance use (i.e., that alcohol, cigarette, and marijuana use is wrong or very wrong) from pre-test to post-test. In all groups, a higher percentage of students believe cigarette use is wrong than believe alcohol use is wrong.

Table 2. Positive Outcome Percentages for Attitudes Toward Substance Use by Participant Group

Positive Outcome Percentages for Attitudes Toward Substance Use			
Participant Group	Alcohol	Cigarettes	Marijuana
Youth Development Participants	81.7%	86.3%	90.1%
LifeSkills Training Participants	79.0%	84.5%	88.0%
All Stars Participants	91.0%	91.1%	98.4%
Project ALERT Participants	88.1%	94.9%	94.9%

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

Table 3 presents positive outcome percentages for perceived risk of harm from use of alcohol, cigarettes, and marijuana for all Youth Development participants, LifeSkills Training Participants, All Stars participants, and Project ALERT participants. More than 77% of participants in all groups maintained or increased positive responses regarding perception of risk of harm from substance use (i.e., that using alcohol, cigarettes, or marijuana posed moderate to great risk of harm). In all but one group, the percentage of students believing regular cigarette use and alcohol use pose risk of harm is higher than the percentage believing marijuana use poses risk of harm. In the Project ALERT group, the percentage for cigarettes was the same as for marijuana.

Table 3. Positive Outcome Percentages for Perceived Risk of Harm from Substance Use by Participant Group

Positive Outcome Percentages for Perceived Risk of Harm from Substance Use			
Participant Group	Alcohol	Cigarettes	Marijuana
Youth Development Participants	79.2%	87.4%	78.1%
LifeSkills Training Participants	78.4%	87.9%	77.1%
All Stars Participants	79.5%	85.1%	77.2%
Project ALERT Participants	87.9%	91.5%	91.5%