

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

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# Prevention Through Mentoring

**Annual Outcome Evaluation Report  
July 2011 – June 2012**

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## Introduction

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The purpose of the Prevention Through Mentoring (PTM) project is to promote the creation and support of community youth mentoring programs to achieve Iowa's goal of primary prevention of the use and abuse of alcohol, tobacco, and other drugs. Nine substance abuse organizations participate in this project: Big Brothers Big Sisters of Siouxland; Clinton Community School District; Helping Services of Northeast Iowa; Henry County Extension; Serve Our Youth; Community Correction Improvement Association; Mason City Youth Task Force; Big Brothers Big Sisters of Central Iowa; and Compass Point. These agencies implemented mentoring programs that pair a youth with an adult mentor. These pairs then try to meet regularly and visit, be it by attending events together, playing, and other activities.

### *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). This report provides data for State Fiscal Year 2012 (FY12). It includes participants who entered the program between July, 2011 and March, 2012. Participants who entered the program in April, May, or June, 2012 are not included in the analysis, as agencies are not required to administer post-tests to participants who took pre-tests less than three months prior to the end of the fiscal year. Four-hundred forty-three participant pre-tests and three-hundred forty-two post-tests were collected during FY12, yielding three-hundred twenty-five matched pre- and post-tests. Two survey instruments are used: the Prevention Through Mentoring Survey, designed for participants in the sixth grade and above; and the Prevention Through Mentoring K-5 Survey, designed for participants in kindergarten through fifth grade.

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

- Has alcohol/cigarette/marijuana use 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 alcohol/cigarette/marijuana use maintained a positive response or increased from pre-test to post-test?

### **Demographics**

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The median age of all PTM participants at post-test was eleven years old. The median age of PTM Survey respondents (sixth grade and above) at post-test was thirteen years old. The median age of K-5 Survey respondents at post-test was nine years old. Fifty-five percent of participants were female, and nearly twelve percent were Hispanic or Latino. Participant racial groups are delineated below:

- 74% White
- 9% Black/African American
- 1% American Indian/Alaskan Native



- 1% Asian
- 4% Some other race
- 10% More than one race

## Outcome Data

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The figures included in the outcome data section detail results from the standard PTM Survey and the K-5 Survey. PTM Survey results include past 30-day substance use, attitudes toward substance use, and perceptions of risk of harm from substance use. K-5 Survey results include perceptions of risk of harm from substance use. PTM Survey data are provided for all participants with matching PTM Survey pre- and post-tests and for One On One Mentoring. One on One Mentoring served some youth who completed the PTM Survey and others who completed the K-5 Survey; thus some data are presented for this program from only one of the two surveys. All other mentoring programs did not meet the minimum sample size necessary for individual reporting.

An attrition analysis was performed on these data to identify potential differences between participants who terminated their involvement in the program and those who remained in the program this fiscal year. More than twenty-two percent of PTM Survey respondents who completed a pre-test did not complete a post-test. Ethnicity had statistically significant associations with whether an individual completed a post-test (Cochran-Mantel-Haenszel tests,  $p < 0.05$ ). Hispanic participants were more likely to drop out of programming or not complete a post-test. Therefore, any findings based on ethnicity may only apply to those who completed a post-test, rather than all who began the program.

Iowa Youth Survey (IYS) data are provided as a reference point for interpreting the outcome data in this report. The Iowa Youth Survey is a triennial census assessment of Iowa's secondary school-age (grades 6, 8, and 11) student attitudes toward substance use and actual use of substances. The 2010 IYS data included here 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 PTM program outcomes (change from pre-test to post-test) rather than comparing program percentages to zero, or no change. (Note: Youth who participated in PTM programming may also have completed the IYS).



*Past 30-Day Use*

Table 1 presents data on past 30-day alcohol, tobacco, and marijuana use for matched pre- and post-tests for all participants completing the PTM Survey and for programs serving middle school age participants. Iowa Youth Survey percentages are provided as a reference. Graph 1 on page 4 presents the information shown in Table 1. The PTM Total data show an increase in use of all substances. Data for the GRIP Mentoring program show no change from pre-test to post-test in past 30-day use of all substances, a favorable outcome for alcohol, tobacco, and marijuana use.

**Table 1. Change in Past 30-Day Use: PTM Survey Participants**

Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test										
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>	53,971 <sup>2</sup>	12	–	<b>+4.50</b>	–	<b>+3.00</b>	–	<b>+2.00</b>	–	<b>+1.50</b>
PTM Total <sup>3</sup>	325	11	4.14	<b>+4.14</b>	1.76	<b>0</b>	2.34	<b>-0.59</b>	2.91	<b>-0.58</b>
One on One Mentoring <sup>4</sup>	80	11	3.75	<b>+3.75</b>	0	<b>+1.23</b>	2.44	<b>+1.22</b>	0	<b>0</b>

<sup>1</sup> IYS entries indicate the yearly average change in 30-day use between all Iowa students in grades 6 and 8. The majority of 6<sup>th</sup> graders completing the IYS were 11 years old; the majority of 8<sup>th</sup> graders were 13. Data were from the 2010 Iowa Youth Survey, State of Iowa report (Questions B30, Any Tobacco Use from ATOD section, and B31).

<sup>2</sup>The total number of 6<sup>th</sup> graders completing the 2010 Iowa Youth Survey was 26,856; the total number of 8<sup>th</sup> graders was 27,115.

<sup>3</sup>The PTM Total row includes all current year Prevention Through Mentoring project participants who completed the standard PTM Survey pre- and post-tests, regardless of their age or the program in which they participated.

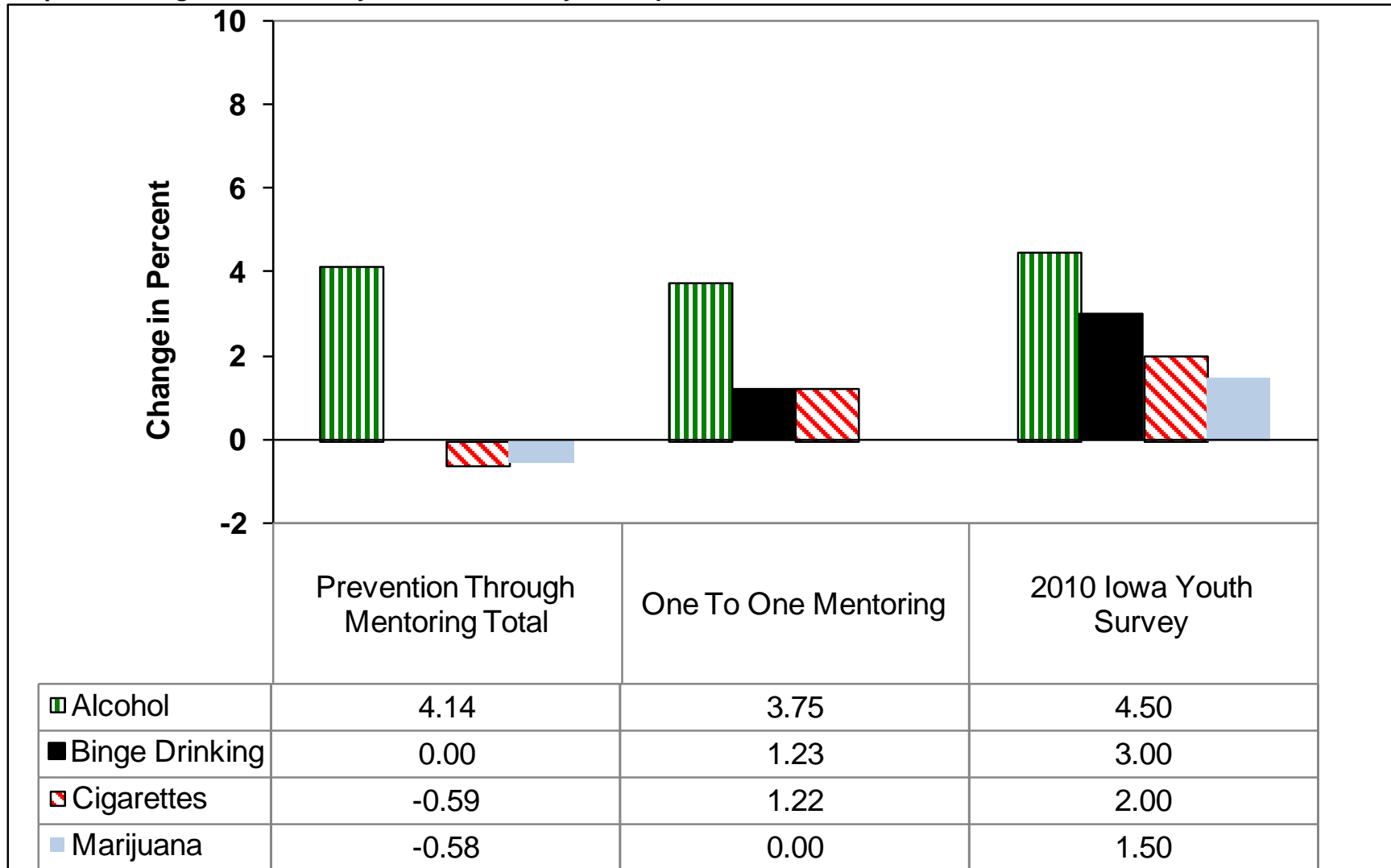
<sup>4</sup>These data are from about half of the One on One Mentoring participants, those who completed the PTM Survey.

Key

IYS      2010 Iowa Youth Survey      PTM Total      All Prevention Through Mentoring Survey Participants



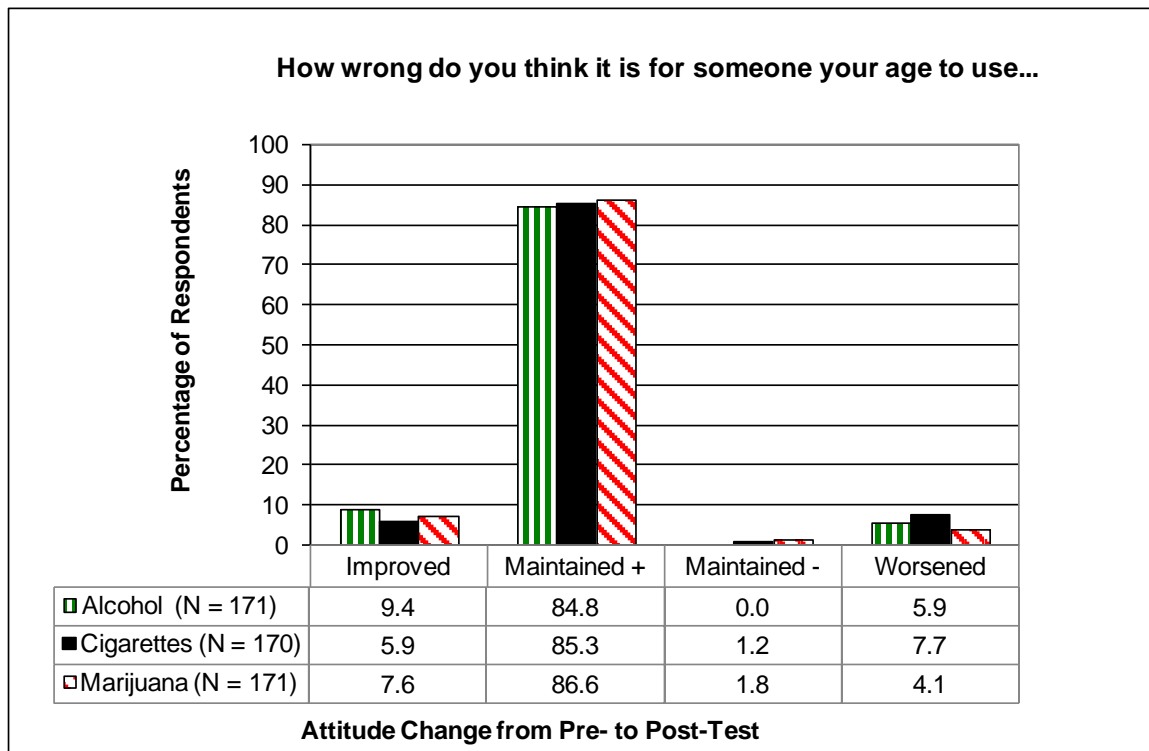
**Graph 1. Change in Past 30-Day Use: PTM Survey Participants**



*Attitudes Toward Substance Use*

Graphs 2 through 5 show change in participants' attitudes from pre- to post-test toward the use of alcohol, cigarettes, and marijuana. Individual attitudes either: 1) "improved," which means that attitudes grew more unfavorable toward use of alcohol, tobacco, 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, tobacco, 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, tobacco, or marijuana use (a negative outcome); or 4) "worsened," meaning that attitudes grew more favorable toward alcohol, tobacco, 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. Graph 2 shows attitude change from the pre-test to the post-test for all PTM Survey respondents and graph 3 shows attitude change for One on One Mentoring participants who completed the PTM survey. The number of matched pre- and post-tests containing a response to the question is shown in the key, in parentheses, following each substance.

**Graph 2. Change in Attitude Toward Alcohol, Cigarette, and Marijuana Use: All PTM Survey Participants**

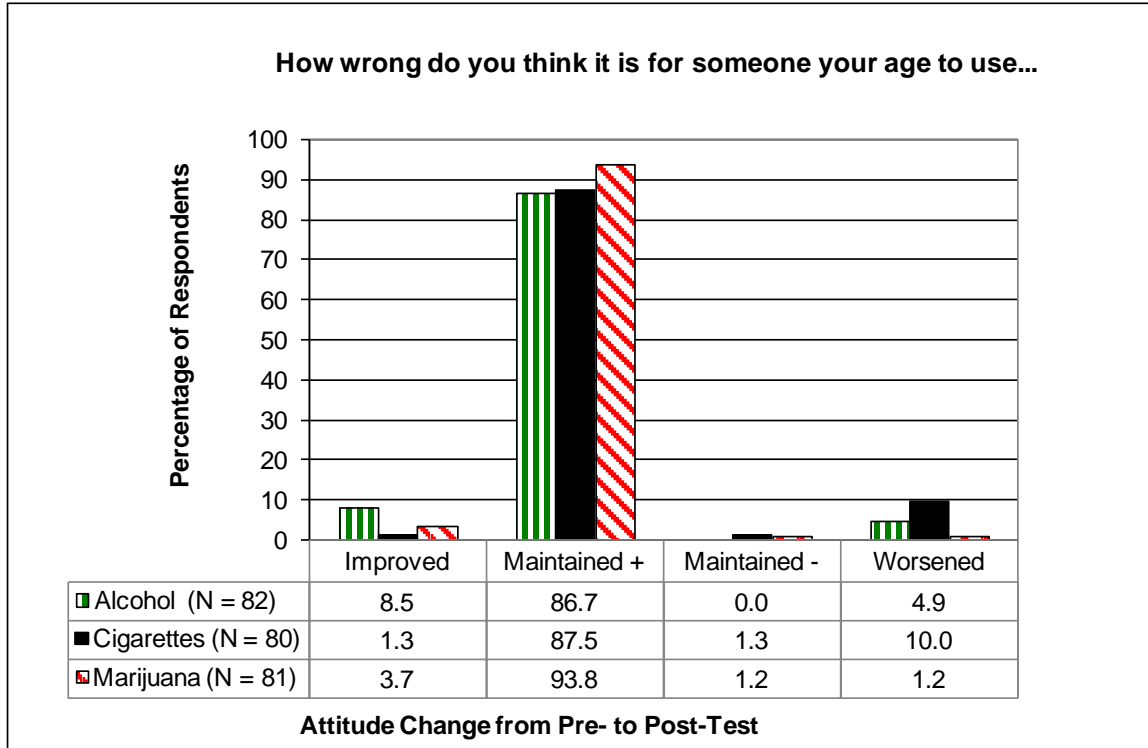


All PTM Survey respondents showed positive outcomes as follows: Alcohol – 94%; Cigarettes – 91%; and Marijuana – 94%.





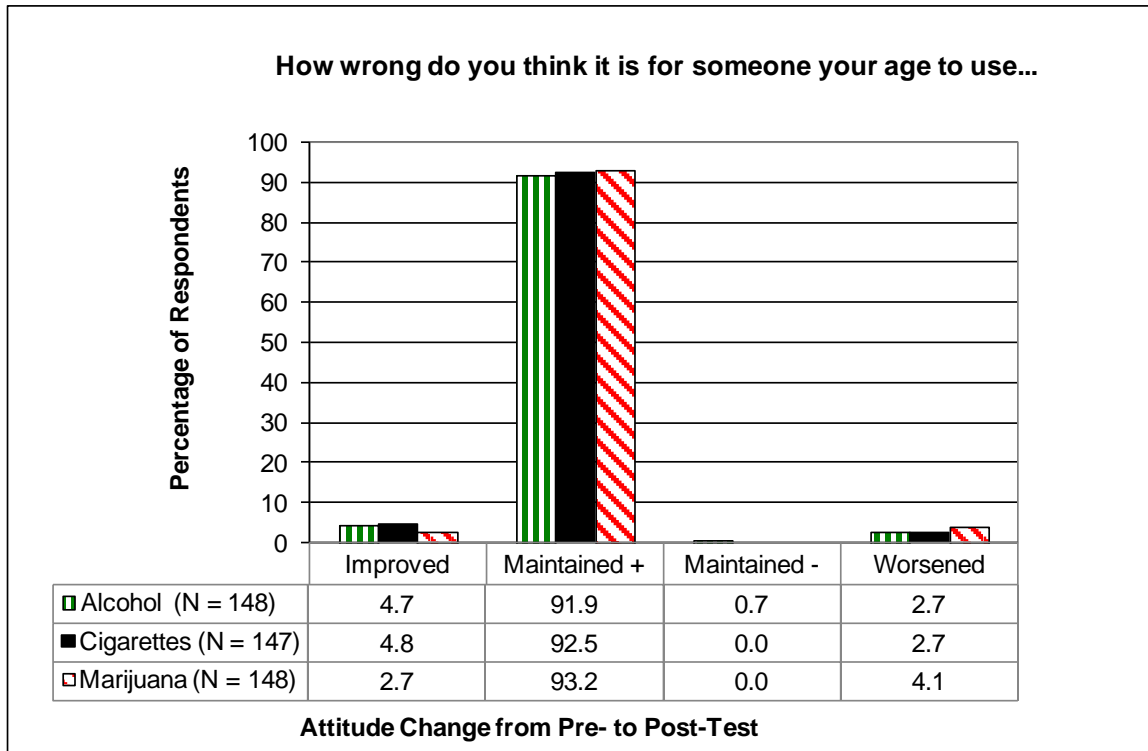
**Graph 3. Change in Attitude Toward Alcohol, Cigarette, and Marijuana Use: One on One Mentoring Participants, PTM Survey**



One on One Mentoring program participants who completed the PTM Survey showed positive outcomes as follows: Alcohol – 95%; Cigarettes – 89%; and Marijuana – 98%.

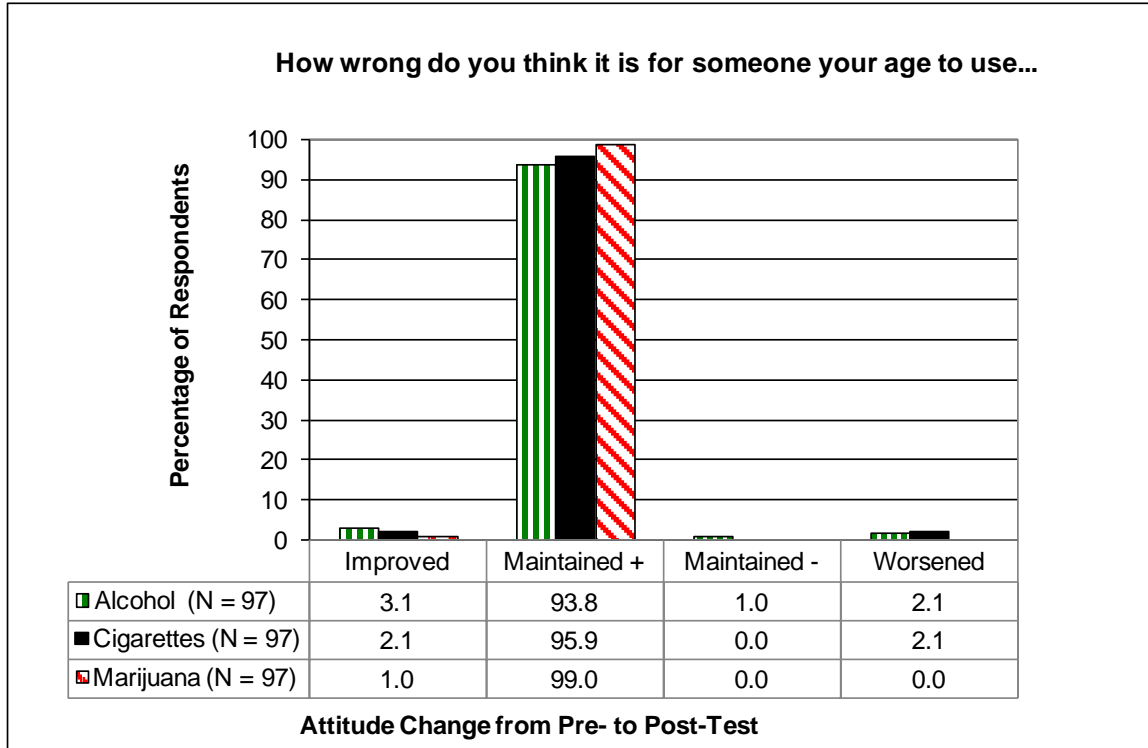
Graphs 4 and 5 show attitude change from the pre-test to the post-test for K-5 Survey respondents. These data are separate from graphs 2 and 3 because the K-5 Survey has simpler response options than the PTM Survey. Graph 4 shows change for all PTM participants who completed the K-5 Survey while Graph 5 shows the same for One on One Mentoring participants.

**Graph 4. Change in Attitude Toward Alcohol, Cigarette, and Marijuana Use: All K-5 Survey Participants**



All K-5 program participants showed positive outcomes as follows: Alcohol – 97%; Cigarettes –97%; and Marijuana – 96%.

**Graph 5. Change in Attitude Toward Alcohol, Cigarette, and Marijuana Use: One on One Mentoring Participants, K-5 Survey**

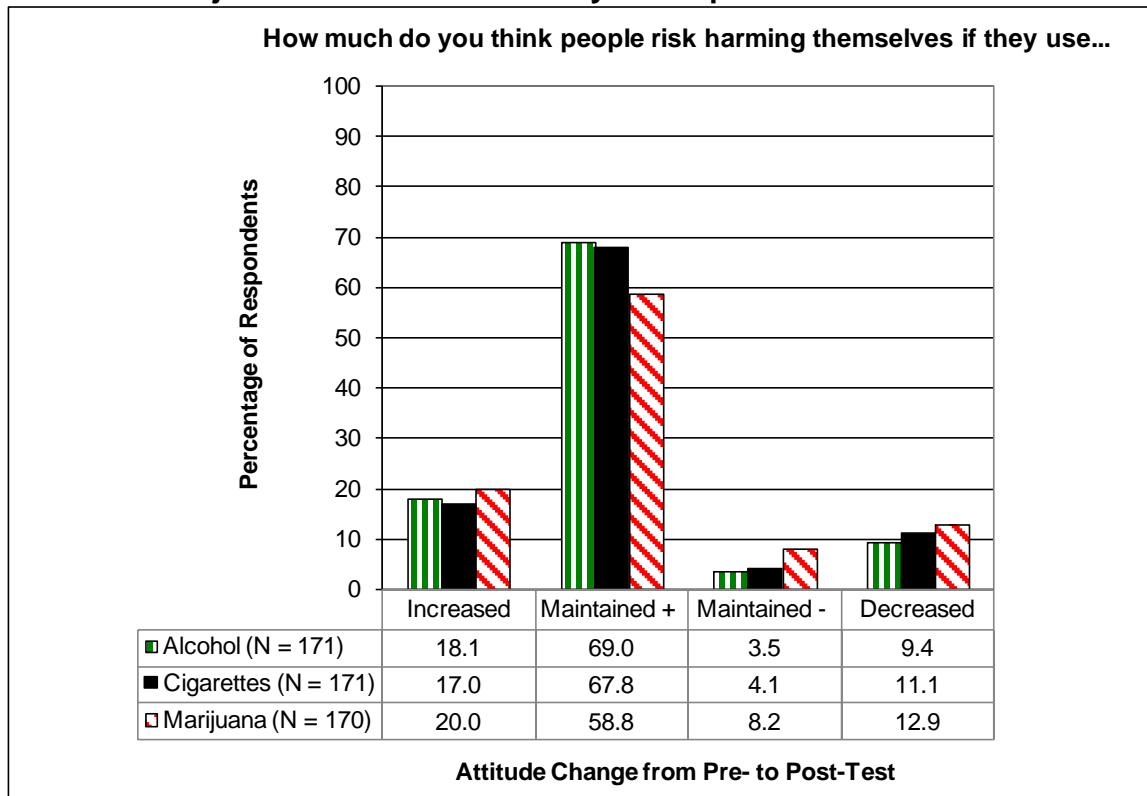


One on One Mentoring program participants who completed the K-5 Survey showed positive outcomes as follows: Alcohol – 97%; Cigarettes – 98%; and Marijuana – 100%.

*Perceived Risk of Harm from Substance Use*

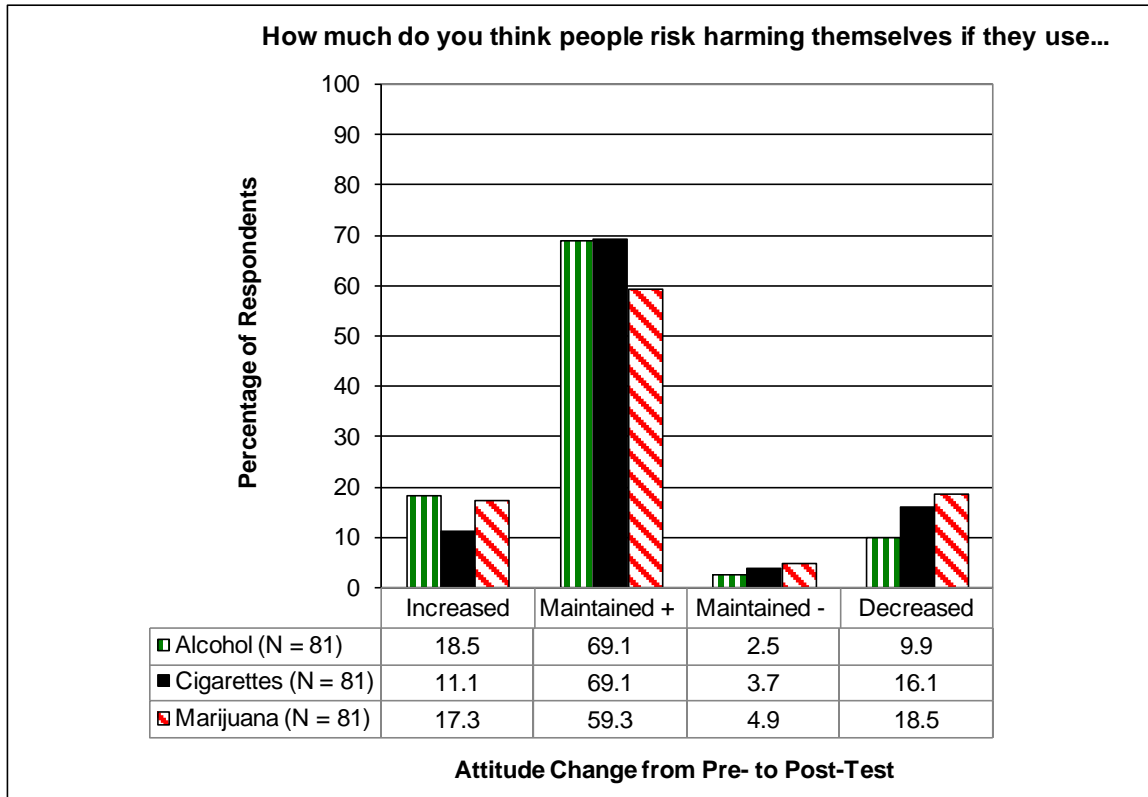
Graphs 6 through 9 show change in participants' perception of risk of harm from using alcohol, cigarettes, and marijuana. Perceptions of risk either: 1) "increased," which means that their reported perceived risk regarding alcohol, tobacco, or marijuana use increased from pre-test to post-test (e.g., 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, tobacco, 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, tobacco, 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. Graph 6 shows attitude change from the pre-test to the post-test for all PTM Survey respondents. Graph 7 shows change in perception of risk for One on One Mentoring participants who completed the PTM survey. The number of matched pre- and post-tests containing a response to the question is shown in the key, in parentheses, following each substance.

**Graph 6. Change in Perceived Risk of Harm from Alcohol, Cigarette, and Marijuana Use: All PTM Survey Participants**



All PTM Survey Respondents showed positive outcomes as follows: Alcohol – 87%; Cigarettes – 85%; and Marijuana – 79%.

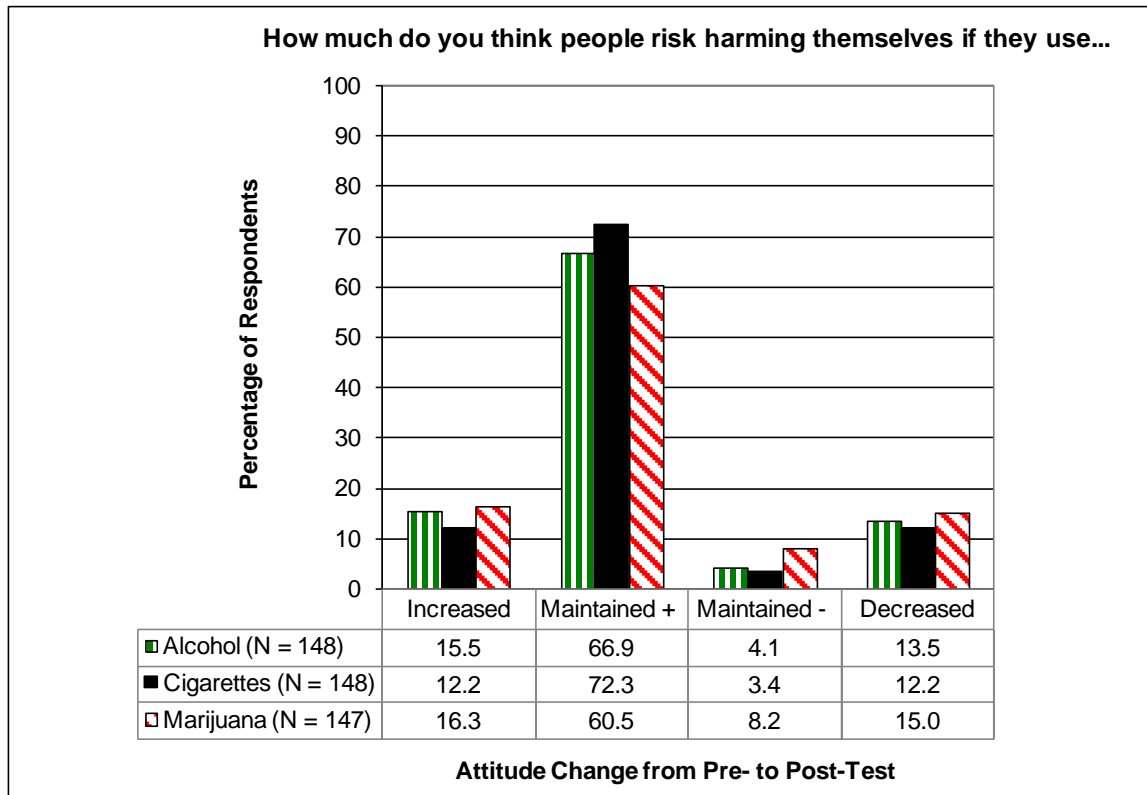
**Graph 7. Change in Perceived Risk of Harm from Alcohol, Cigarette, and Marijuana Use: One on One Mentoring Participants, PTM Survey**



One on One Mentoring participants who completed the PTM Survey showed positive outcomes as follows: Alcohol – 88%; Cigarettes – 80%; and Marijuana – 77%.

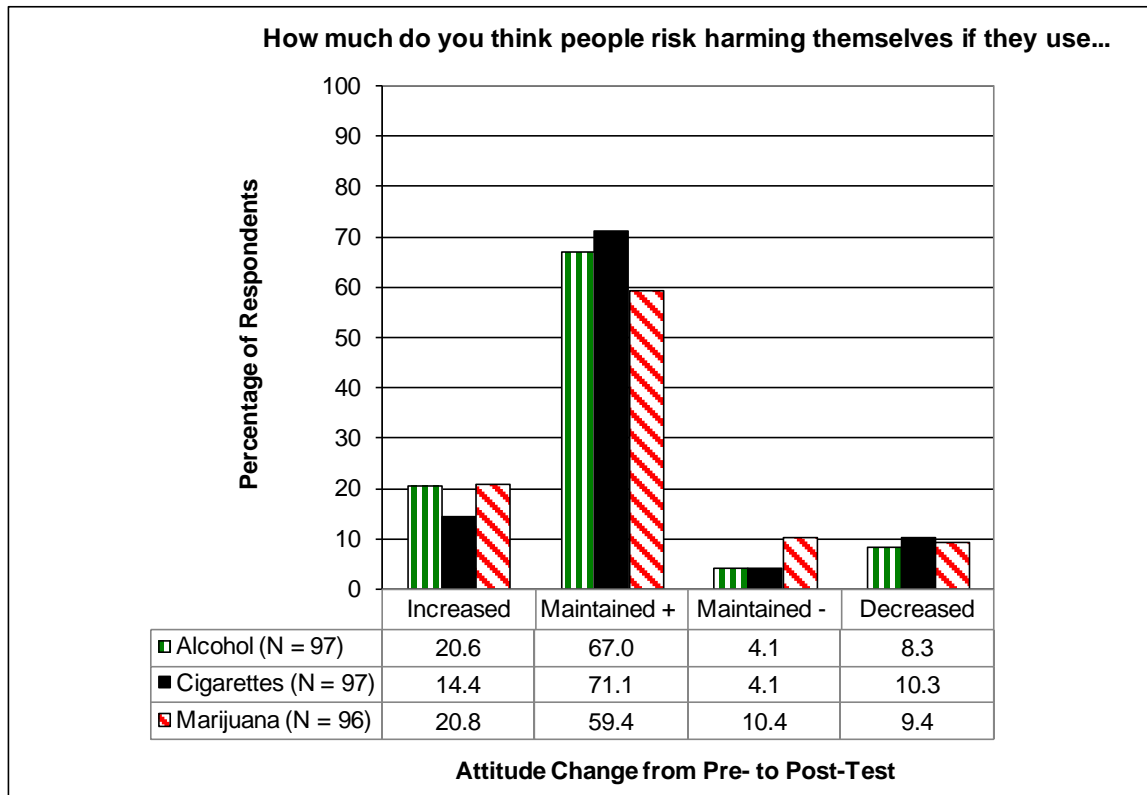
Graphs 8 and 9 show change in participants' perception of risk of harm from using alcohol, cigarettes, and marijuana for K-5 Survey respondents. These data are separate from graphs 6 and 7 because the K-5 Survey has simpler response options than the PTM Survey. Graph 8 shows change for all PTM participants who completed the K-5 Survey while Graph 9 shows the same for One on One Mentoring participants.

**Graph 8. Change in Perceived Risk of Harm from Alcohol, Cigarette, and Marijuana Use: All K-5 Survey Participants**



All K-5 Survey participants showed positive outcomes as follows: Alcohol – 82%; Cigarettes – 85%; and Marijuana – 77%.

**Graph 9. Change in Perceived Risk of Harm from Alcohol, Cigarette, and Marijuana Use: One on One Mentoring Participants, K-5 Survey**



One on One Mentoring participants who completed the K-5 Survey showed positive outcomes as follows: Alcohol – 88%; Cigarettes – 86%; and Marijuana – 80%.

***Mentor-Mentee Match Data***

Agencies submitted tracking forms to the Consortium containing information about meetings between mentors and mentees. This information included: 1) the total number of meetings between each pair; 2) the average length of meetings between each pair; and 3) the average number of meetings per month for each pair. Only four of the eight participating agencies submitted match data for this reporting period.

One-hundred seventy-six mentor-mentee pairs are included in the match data analysis. All other pairs are not included due to incomplete reporting, the matches had occurred less than three months before the end of the reporting period (agencies were not required to report match meeting data for those participants), or the agency did not submit pairs data. The median number of total meetings this year for each mentor and mentee pair was 12 (Minimum = 1; Maximum = 34). The median duration of individual meetings between pairs was 1 hour (Minimum = 5



minutes; Maximum = 658 minutes). The median number of meetings per month between pairs was 3 (Minimum = 1; Maximum = 4).

## Conclusion

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This evaluation of the Prevention Through Mentoring project answers the following questions:

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

Data for both the total PTM Survey respondent group and the One on One Mentoring – PTM Survey group show positive outcomes. The PTM Survey respondent group shows a decrease in cigarette and marijuana use and no change in binge drinking, while the increase in alcohol use is less than those in the IYS. The One on One Mentoring – PTM Survey group also shows less of an increase than those in the IYS.

*Has the percentage of the target population who indicate positive attitudes (believing substance use in someone their age is wrong or very wrong) at baseline (pre-test) maintained or increased after the intervention (post-test)?*

Table 2 found below presents positive outcome percentages for attitudes toward alcohol, tobacco, and marijuana use for all PTM Survey participants, One on One PTM Survey participants, all K-5 Survey participants, and One on One Mentoring K-5 Survey participants. More than eighty-nine percent of PTM survey participants (both all and One on One Mentoring) participants maintained or increased their belief from pre-test to post-test that alcohol, tobacco, and marijuana use is wrong. Over ninety-five percent of all K-5 Survey (both all and One on One Mentoring) respondents showed positive outcomes for all three substances.

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

Positive Outcome Percentages for Attitudes Toward Substance Use			
Participant Group	Alcohol	Tobacco	Marijuana
All PTM Survey Participants	94%	91%	94%
One on One Mentoring Participants – PTM Survey	95%	89%	98%
All K-5 Survey Participants	97%	97%	96%
One on One Mentoring Participants – K-5 Survey	97%	98%	100%





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

Table 3 found below presents positive outcome percentages for perceived risk of harm from alcohol, tobacco, and marijuana use for all PTM Survey participants, One on One PTM Survey participants, all K-5 Survey participants, and One on One Mentoring K-5 Survey participants. At least seventy-seven percent of participants in all groups maintained or increased their perception of moderate to great risk of harm from using alcohol, tobacco, and drugs (i.e., that using alcohol, cigarettes, or marijuana posed moderate to great risk of harm).

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

<b>Positive Outcome Percentages for Perceived Risk of Harm from Substance Use</b>			
<b>Participant Group</b>	<b>Alcohol</b>	<b>Tobacco</b>	<b>Marijuana</b>
All PTM Survey Participants	87%	85%	79%
One on One Mentoring Participants – PTM Survey	88%	80%	77%
All K-5 Survey Participants	82%	85%	77%
One on One Mentoring Participants – K-5 Survey	88%	86%	80%