



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

PREVENTION THROUGH MENTORING PROGRAM EVALUATION

ANNUAL REPORT

JULY 2008 – JUNE 2009

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CITATION OF REFERENCES RELATED TO THIS REPORT IS APPRECIATED. SUGGESTED CITATION:

WHITE, K., CLAYTON, R., & ARNDT, S. (2009). PREVENTION THROUGH MENTORING PROGRAM EVALUATION: ANNUAL REPORT. (IOWA DEPARTMENT OF PUBLIC HEALTH CONTRACT #5889YM51). IOWA CITY, IA: IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION. [HTTP://ICONSORTIUM.SUBST-ABUSE.UIOWA.EDU/](http://iconsortium.subst-abuse.uiowa.edu/)

Table of Contents

Introduction.....	1
Demographics.....	1
Outcome Data.....	2
Change in Past 30-Day Use.....	3
Table 1: Change in Past 30-Day Use: Programs Serving Middle School Age Youth.....	3
Graph 1: Change in Past 30-Day Use: Programs Serving Middle School Age Youth.....	4
Table 2: Change in Past 30-Day Use: Programs Serving High School Age Youth.....	5
Graph 2: Change in Past 30-Day Use: Programs Serving High School Age Youth.....	6
Attitudes Toward Use.....	7
Graph 3: Change in Attitude Toward Use: PTM Survey Respondents.....	7
Graph 4: Change in Attitude Toward Use: GRIP Mentoring Participants.....	8
Graph 5: Change in Attitude Toward Use: One on One Mentoring Participants.....	9
Graph 6: Change in Attitude Toward Use: Link to LNX Mentoring Participants.....	10
Perceived Risk of Harm from Use.....	11
Graph 7: Change in Perceived Risk: PTM Survey Respondents.....	11
Graph 8: Change in Perceived Risk: GRIP Mentoring Participants.....	12
Graph 9: Change in Perceived Risk: One on One Mentoring Participants.....	13
Graph 10: Change in Perceived Risk: Link to LNX Mentoring Participants.....	14
Graph 11: Change in Perception of Harmfulness of Use: PTM K-5 Survey Respondents.....	15
Mentor-Mentee Match Data.....	15
Conclusion.....	16
Table 3: Positive Outcome Percentages for Attitudes by Participant Group.....	17
Table 4: Positive Outcome Percentages for Perceived Risk by Participant Group.....	18

Introduction

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; Henry County Extension; Iowa City Community School District; Loess Hills Area Education Agency; Mason City Youth Task Force; Northwest Iowa Alcohol and Drug Treatment Unit; and Youth and Shelter Services.

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), and again at the end of each project year (post-test). This report provides data for State Fiscal Year 2009 (FY09). This includes participants who entered the program between July, 2008 and March, 2009, and participants who entered the program prior to July, 2008 and remained in the program this year. Participants who entered the program in April, May, or June, 2009 are not included in the analysis, as agencies are not required to administer post-tests to participants who took pre-tests three months or less prior to the end of the fiscal year. Seven-hundred seventy-six participant pre-tests and six-hundred eighty-five post-tests were collected during the 2009 fiscal year, yielding five-hundred eighty-eight 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/tobacco/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/tobacco/marijuana use maintained a positive response or increased from pre-test to post-test?

Demographics

The median age of all PTM participants at post-test was eleven years. The median age of PTM Survey respondents (sixth grade and above) at post-test was thirteen years. The median age of K-5 Survey respondents at post-test was nine years. Fifty-three percent (52.5%) of participants were female, and nearly eleven percent (10.6%) were Hispanic or Latino. Participant racial groups are delineated below:

- 75.0% White
- 8.5% Black/African American
- 1.5% American Indian/Alaskan Native
- 1.2% Asian
- 0.2% Hawaiian/other Pacific Islander

- 13.6% More than one race

Outcome Data

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 three mentoring programs: GRIP (Great Relationships in Pairs) Mentoring, Link to LNX (Life, Networks & eXcellence), and One on One Mentoring. Other mentoring programs did not meet the minimum sample size necessary for individual reporting. Those programs are Academic Mentoring Program; Campus Pals; Guiding Good Choices; Kinship; North Fayette Mentoring; Siblings by Choice; Valley Mentoring; and Volunteers For Youth.

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 year. Eleven percent of PTM Survey respondents who completed a pre-test did not complete a post-test. Age, grade, past 30-day alcohol use, and past 30-day prescription drug use had statistically significant associations with whether an individual completed the PTM Survey post-test (Cochran-Mantel-Haenszel tests, $p < 0.05$). Participants who were thirteen years old and participants who were in the eighth grade had a greater tendency to drop out of the program or not complete a post-test than participants of other ages and in other grades. Participants who reported no past 30-day use of alcohol and those reporting no past 30-day use of prescription drugs at pre-test had a greater tendency to drop out of the program or not complete a post-test than those reporting use of those substances. Thus, the participants represented in the PTM Survey outcome data presented in this report are in some ways different from those who began the program. This should be taken into consideration when interpreting the outcome data. Twelve percent of K-5 Survey respondents who completed a pre-test did not complete a post-test. However, there were no statistically significant differences on any variables between participants who completed a K-5 Survey post-test and those who did not.

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 2008 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).

Change in 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 and the percentages are greater than those of the IYS. Data for the GRIP Mentoring program show increases in past 30-day use of all substances, but the increase in use of alcohol is less than in the IYS. One on One Mentoring data show increases in use of alcohol and tobacco, though the percentages are less than the IYS percentages. One on One Mentoring data show no change (therefore, no increase) in use of marijuana from pre-test to post-test.

Table 1. Change in Past 30-Day Use: PTM Total and Programs Serving Middle School Age Youth

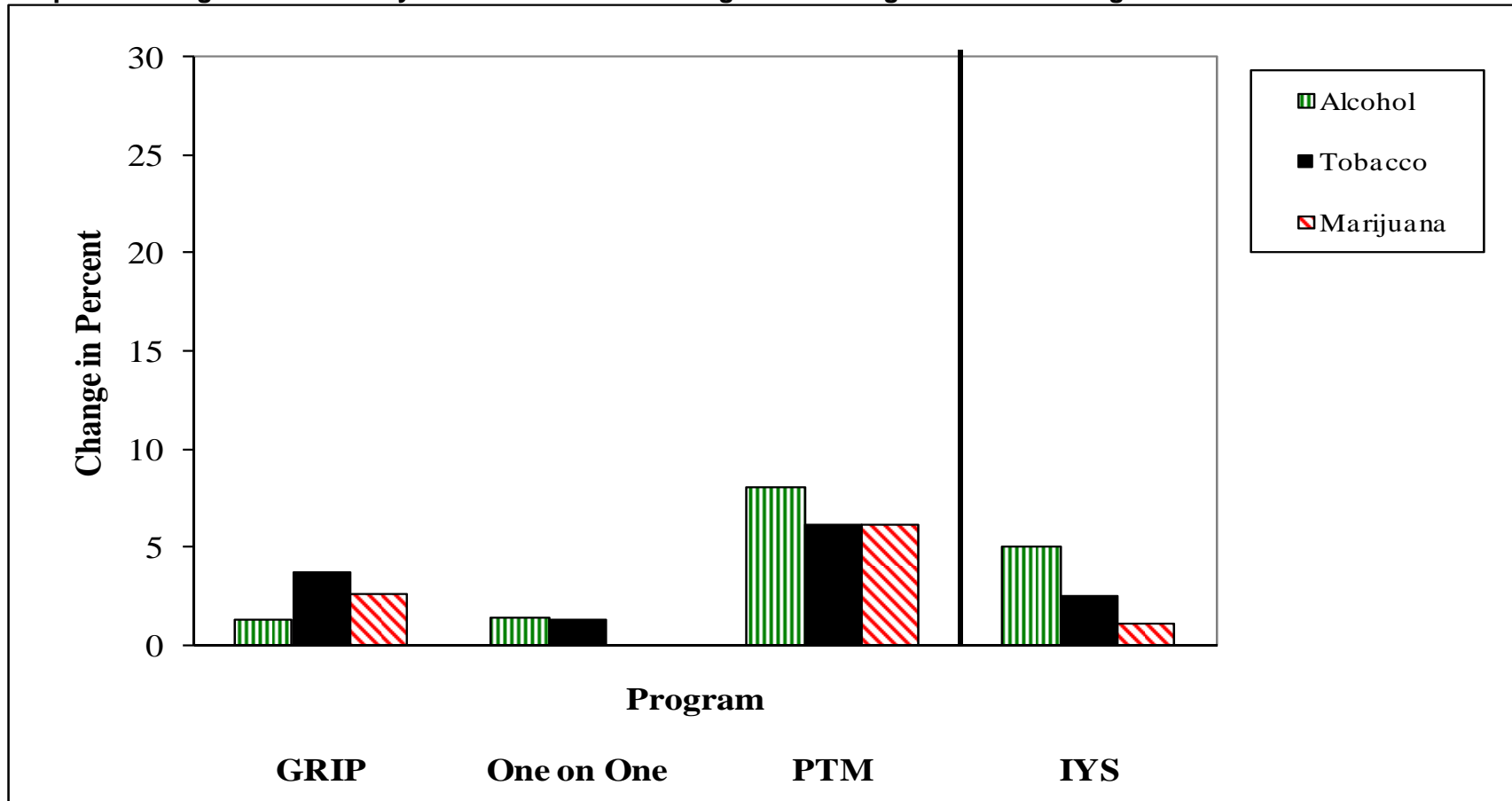
Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: PTM Total and Programs Serving Middle School Age Youth								
Group	N	Median Age	Alcohol		Tobacco		Marijuana	
			Pre-test %	Change	Pre-test %	Change	Pre-test %	Change
IYS ¹	64,937 ²	13	–	+5.00	–	+2.50	–	+1.00
PTM Total ³	279	13	14.44	+7.94	13.67	+6.11	6.12	+6.11
GRIP	82	10	5.00	+1.25	1.25	+3.75	0	+2.50
One on One	76	11	4.05	+1.36	2.70	+1.35	1.35	0

¹ IYS entries indicate the yearly average change in past 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 2008 Iowa Youth Survey, State of Iowa report (pgs.12, 29-30, and 90-91).
²The total number of 6th graders completing the Iowa Youth Survey was 32,264; the total number of 8th graders was 32,673.
³The 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.

Key

IYS	Iowa Youth Survey	GRIP	Great Relationships in Pairs Mentoring Program
PTM	Prevention Through Mentoring Survey Respondents	One on One	One on One Mentoring Program

Graph 1. Change in Past 30-Day Use: PTM Total and Programs Serving Middle School Age Youth



<u>Key</u>			
IYS	Iowa Youth Survey	GRIP	Great Relationships in Pairs Mentoring Program
PTM	Prevention Through Mentoring Survey Respondents	One on One	One on One Mentoring Program

Table 2 presents data on past 30-day alcohol, tobacco, and marijuana use for programs serving high school age participants. Iowa Youth Survey and PTM survey percentages are provided as a reference. Graph 2 on page 6 graphically presents the information shown in Table 2. Data for the Link to LNX Mentoring program show increases in past 30-day use of all substances, and the increases are greater than in the IYS. It should be noted that the median age for Link to LNX participants is two years older than the median age of the IYS comparison group, and that the Link to LNX program targets at-risk and high-risk youth. In addition, caution should be used in interpreting this program's data due to the relatively small sample size.

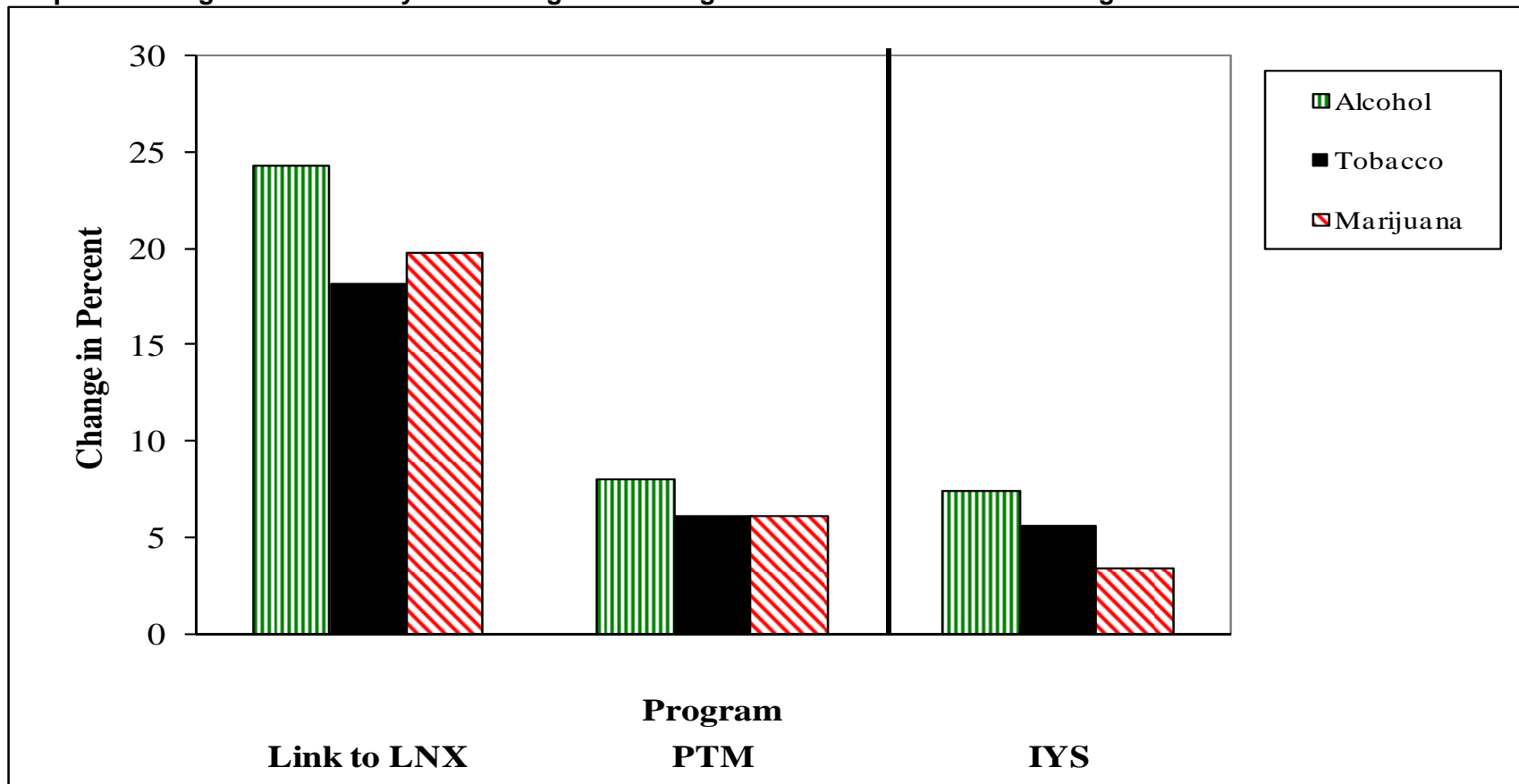
Table 2. Change in Past 30-Day Use: Programs Serving High School Age Youth

Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: Programs Serving High School Age Youth								
Group	N	Median Age	Alcohol		Tobacco		Marijuana	
			Pre-test %	Change	Pre-test %	Change	Pre-test %	Change
IYS ¹	63,803 ²	14	–	+7.33	–	+5.66	–	+3.33
PTM Total ³	279	13	14.44	+7.94	13.67	+6.11	6.12	+6.11
Link to LNX	66	16	50.00	+24.24	48.48	+18.19	+24.24	+19.70

¹IYS entries indicate the yearly average change in 30-day use between all Iowa students in grades 8 and 11. The majority of 8th graders completing the IYS were 13 years old; the majority of 11th graders were 16. Data were from the 2008 Iowa Youth Survey, State of Iowa report (pgs.12, 29-30, and 90-91).
²The total number of 8th graders completing the Iowa Youth Survey was 32,673; the total number of 11th graders was 31,130.
³The 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.

<u>Key</u>	
IYS	Iowa Youth Survey
PTM	Prevention Through Mentoring Survey Respondents
Link to LNX	Link to Life, Networks & eXcellence

Graph 2. Change in Past 30-Day Use for High School Age Youth: Link to LNX Mentoring



Key

IYS Iowa Youth Survey

PTM Prevention Through Mentoring Survey Respondents

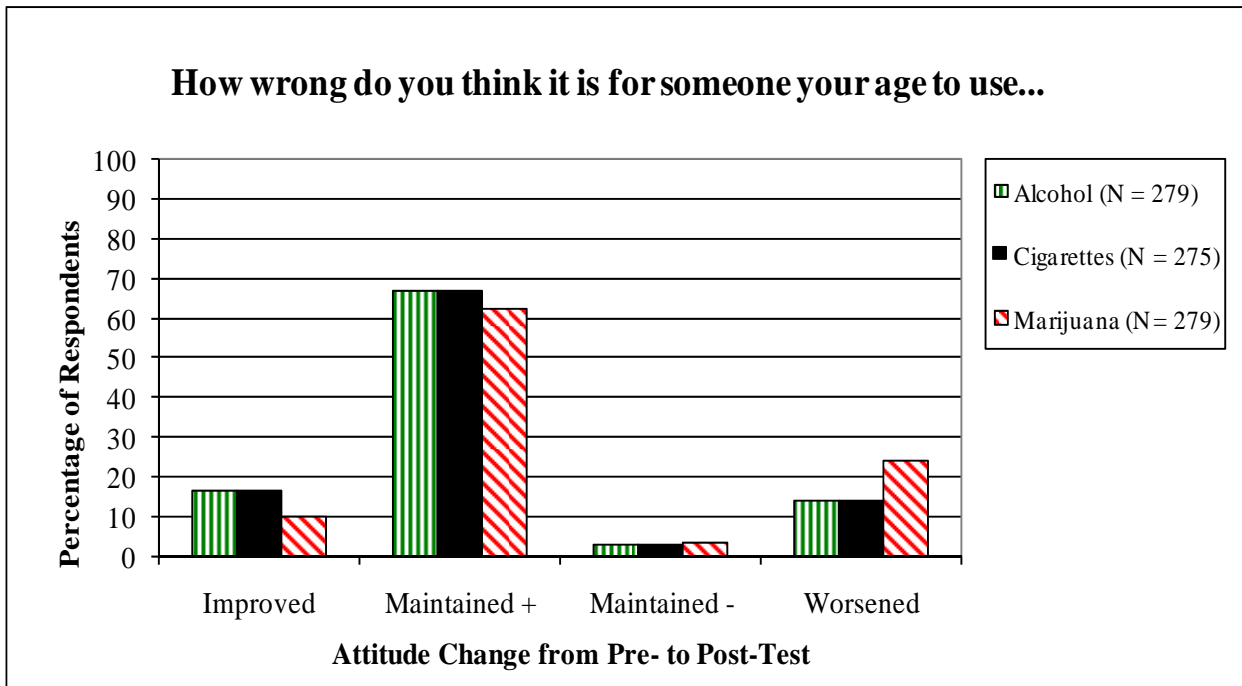
Link to LNX

Link to Life, Networks & eXcellence

Attitudes Toward Use

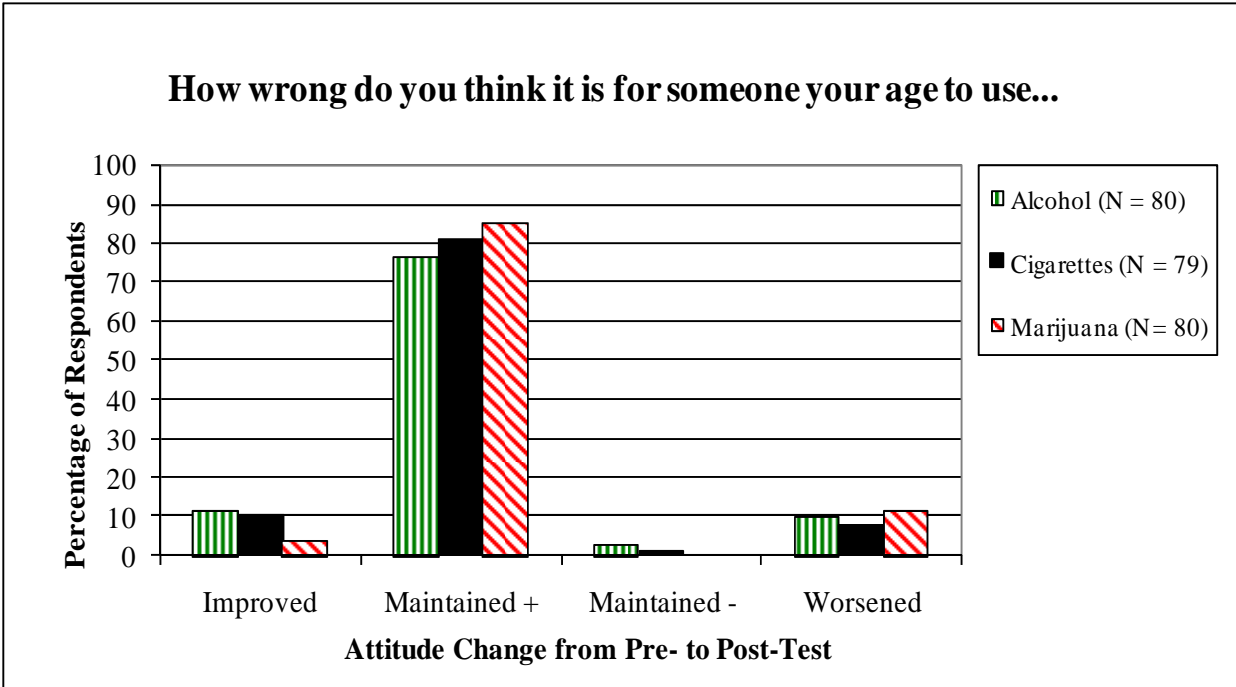
Graphs 3 through 6 show change in participants' attitudes from pre- to post-test toward the use of alcohol, cigarettes, and marijuana. Individual attitudes either: 1) "improved," which means that attitudes grew more unfavorable toward use of alcohol, tobacco, or marijuana (e.g., respondent felt alcohol 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 3 shows attitude change from the pre-test to the post-test for PTM Survey respondents. Graphs 4, 5, and 6 show attitude change for GRIP Mentoring, One on One Mentoring, and Link to LNX participants, respectively. 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 3. Change in Attitude Toward Alcohol, Cigarette, and Marijuana Use: PTM Survey Respondents



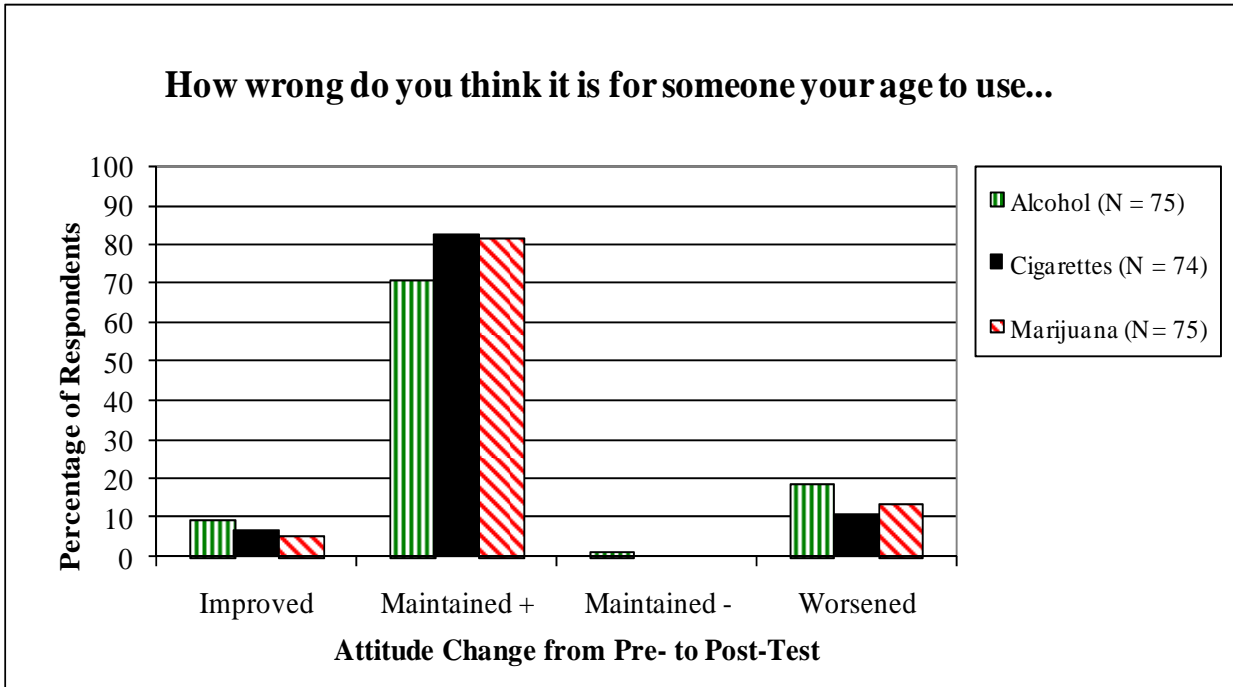
PTM Survey respondents showed positive outcomes as follows: Alcohol – 76%; Cigarettes – 83%; and Marijuana – 72%.

**Graph 4. Change in Attitude Toward Alcohol, Cigarette, and Marijuana Use:
GRIP Mentoring Participants**



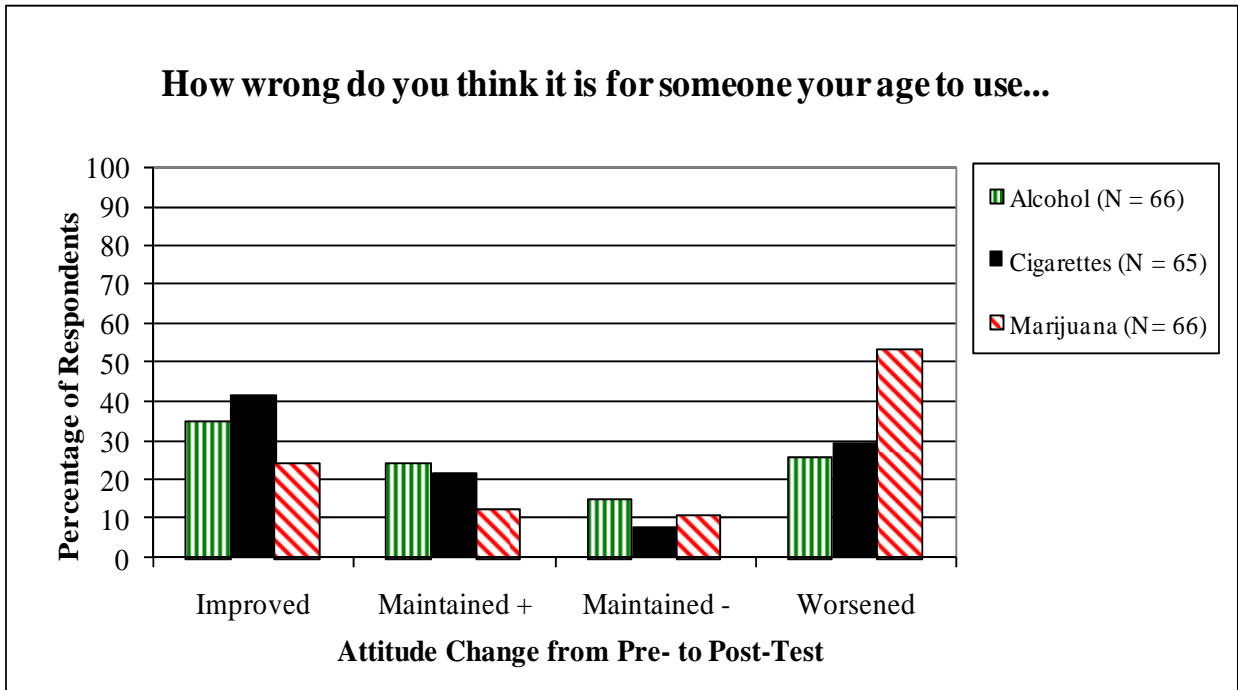
GRIP Mentoring program participants showed positive outcomes as follows: Alcohol – 88%; Cigarettes – 91%; and Marijuana – 89%.

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



One on One Mentoring program participants showed positive outcomes as follows:
Alcohol – 80%; Cigarettes – 89%; and Marijuana – 87%.

**Graph 6. Change in Attitude Toward Alcohol, Cigarette, and Marijuana Use:
Link to LNX Mentoring Participants**

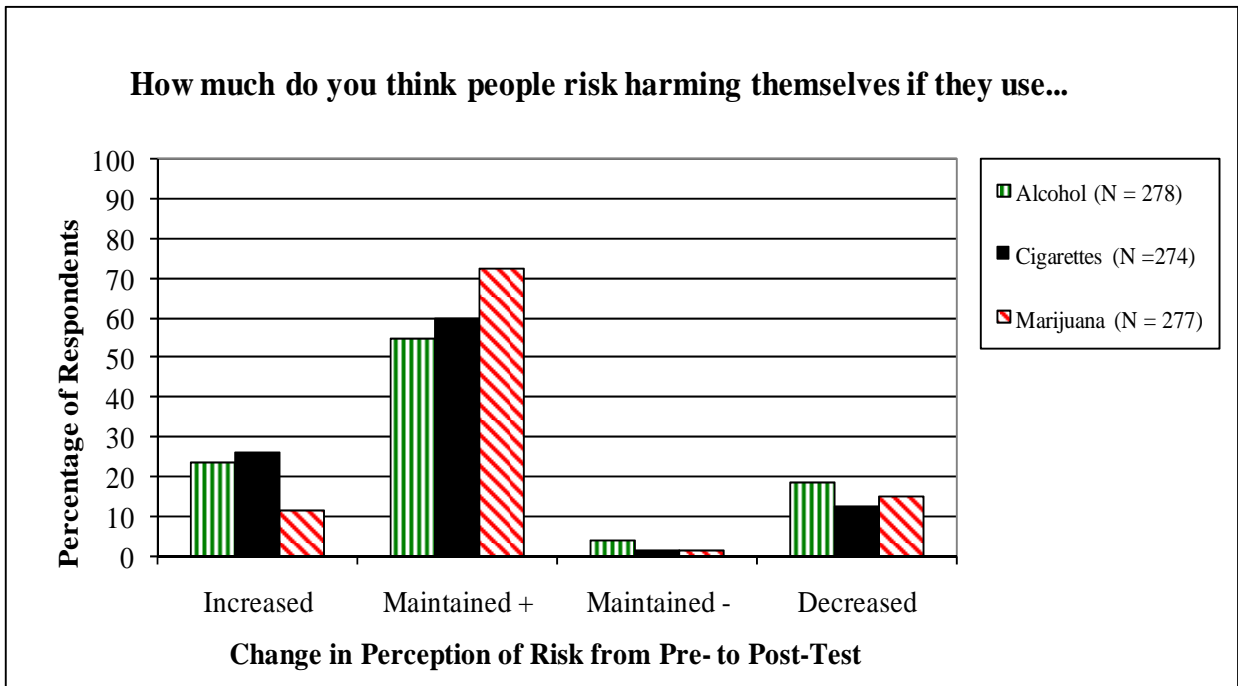


Link to LNX Mentoring program participants showed positive outcomes as follows:
Alcohol – 59%; Cigarettes – 63%; and Marijuana – 36%.

Perceived Risk of Harm from Use

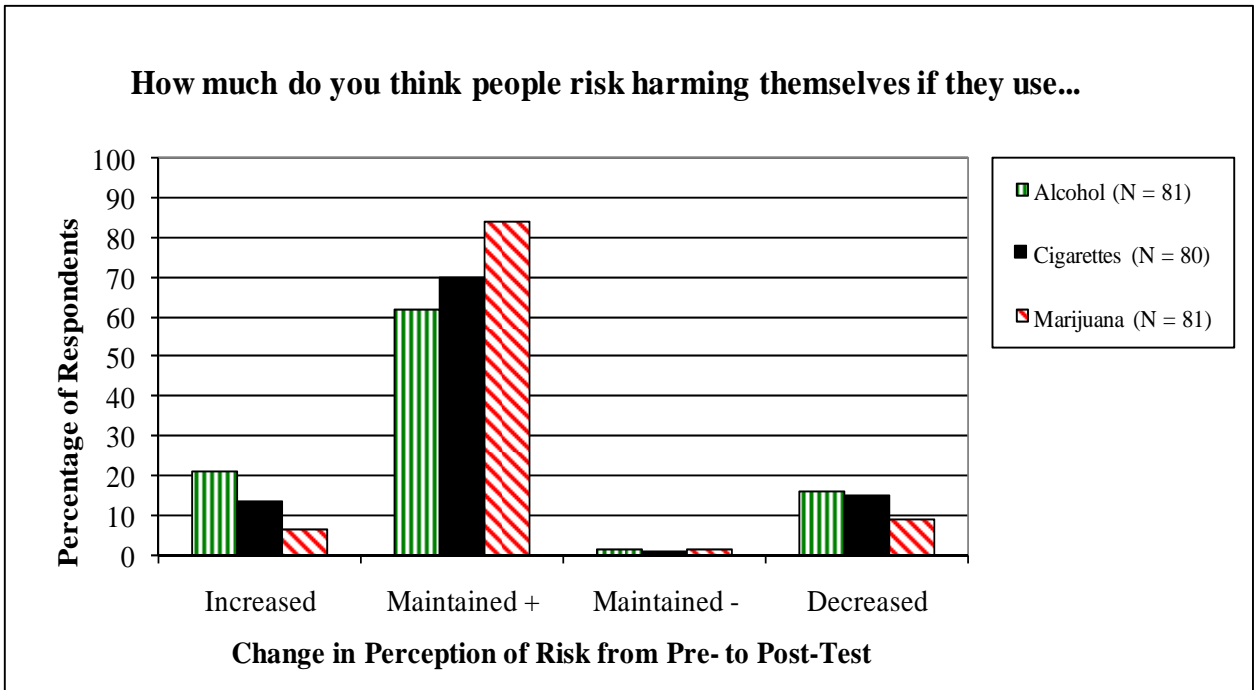
Graphs 7 through 10 show change in participants' perception of risk of harm from using alcohol, cigarettes, and marijuana. Perceptions of risk either: 1) "increased," which means that their reported perceived risk regarding alcohol, tobacco, or marijuana use increased from pre-test to post-test (e.g., 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 7 shows attitude change from the pre-test to the post-test for PTM Survey respondents. Graphs 8, 9, and 10 show change in perception of risk for GRIP Mentoring, One on One Mentoring, and Link to LNX participants, respectively. 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 7. Change in Perceived Risk of Harm from Alcohol, Cigarette, and Marijuana Use: PTM Survey Respondents



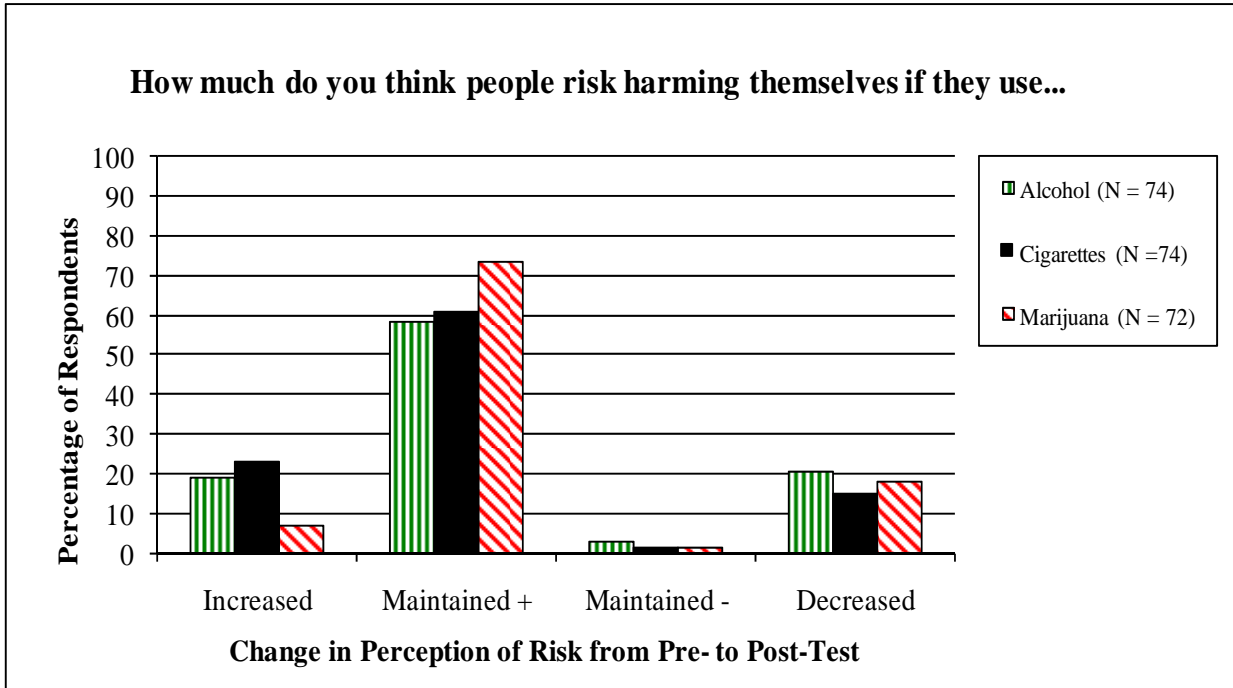
PTM Survey Respondents showed positive outcomes as follows: Alcohol – 78%; Cigarettes – 86%; and Marijuana – 84%.

Graph 8. Change in Perceived Risk of Harm from Alcohol, Cigarette, and Marijuana Use: GRIP Mentoring Participants



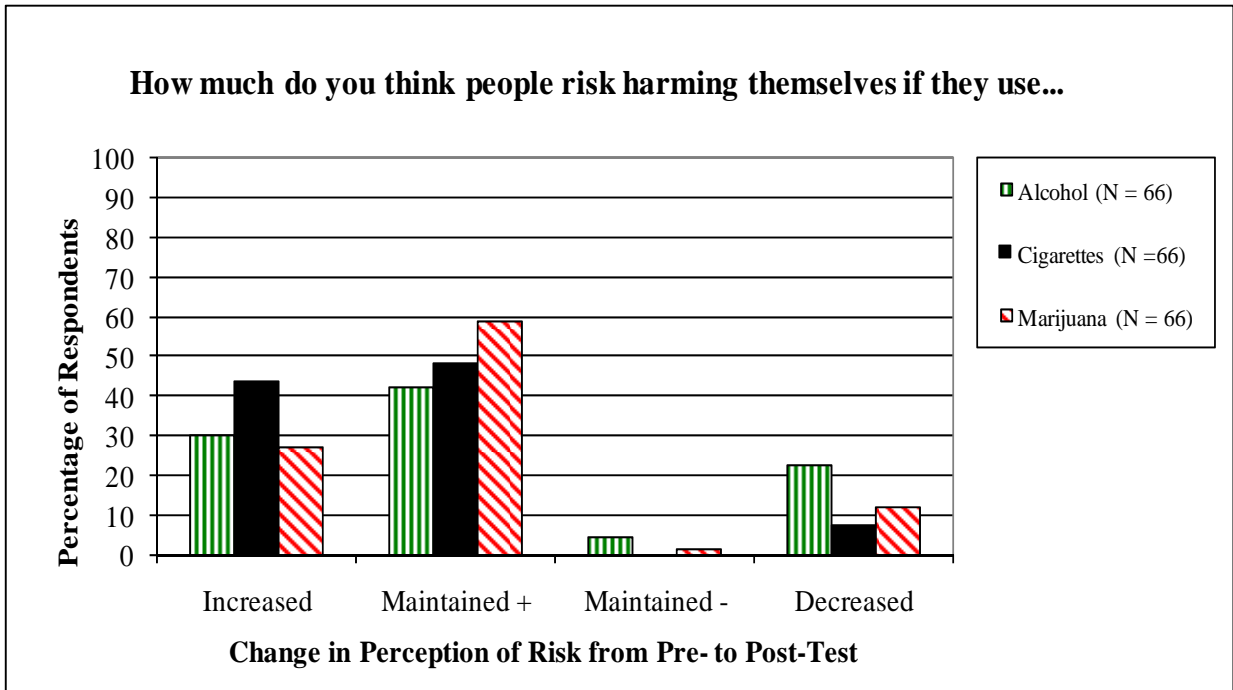
GRIP Mentoring participants showed positive outcomes as follows: Alcohol – 83%; Cigarettes – 84%; and Marijuana – 90%.

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



One on One Mentoring participants showed positive outcomes as follows: Alcohol – 77%; Cigarettes – 84%; and Marijuana – 81%.

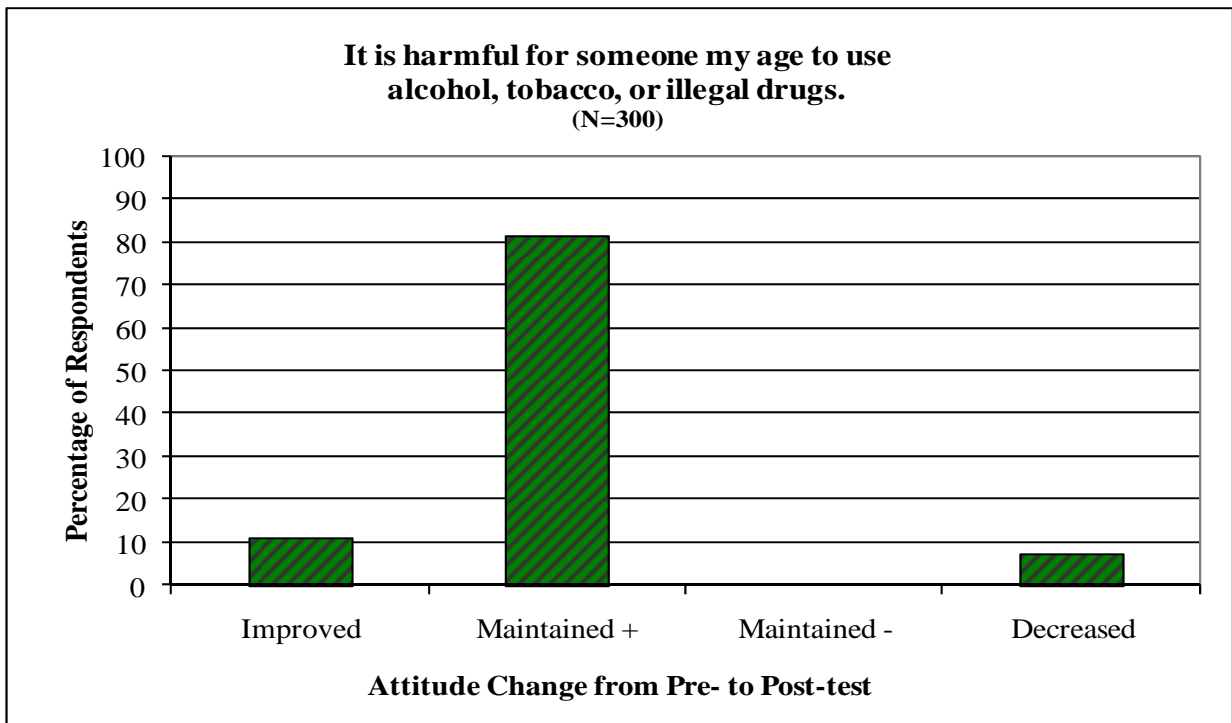
Graph 10. Change in Perceived Risk of Harm from Alcohol, Cigarette, and Marijuana Use: Link to LNX Mentoring Participants



Link to LNX Mentoring participants showed positive outcomes as follows: Alcohol – 72%; Cigarettes – 92%; and Marijuana – 86%.

Graph 11 shows change in K-5 Survey respondents' perception of the harmfulness of using substances. This item on the K-5 Survey differs in some ways from the perception of risk questions on the PTM Survey. The PTM Survey asks, "How much do you think people risk harming themselves..." for each substance separately, and gives the response options of, "no risk," "slight risk," "moderate risk," and "great risk." The item on the K-5 Survey states, "It is _____ harmful for someone my age to use alcohol, tobacco, or illegal drugs," and gives the fill-in-the-blank response options of, "always," "most of the time," "sometimes," "hardly ever," and "never."

Graph 11. Perception of Harmfulness of Using Alcohol, Tobacco, or Illegal Drugs: PTM K-5 Survey Respondents



K-5 Survey respondents showed a 93% positive response outcome.

Mentor-Mentee Match Data

Agencies submitted tracking forms to the Consortium containing information about mentoring match meetings. 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. Eight agencies submitted data for the fiscal year. Clinton Community School District did not submit match meeting data. Prior to the reporting deadline, the school district's new administrator contacted the Consortium for clarification on the type of data they needed to provide and was collaborating with their subcontractor to compile the data. However, no data was submitted to the Consortium prior to the writing of this report.

Six-hundred seventy-eight mentor-mentee pairs are included in the match data analysis. Sixty-seven pairs were not included due to incomplete reporting by mentors or because 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). The median number of total meetings this year for each mentor and mentee pair was 20 (Minimum = 1; Maximum = 84). The median duration of individual meetings between pairs was 1 hour (Minimum = 1 minute; Maximum = 16 hours, 12 minutes). The median number of meetings per month between pairs was 3 (Minimum = 0.08; Maximum = 12).

Conclusion

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

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

Data for the total PTM Survey respondent group and for Link to LNX program participants show an increase in use of all substances from pre-test to post-test and the increases are greater than seen in the Iowa Youth Survey data. Two factors may contribute to these outcomes for the Link to LNX program: participants were primarily at-risk and high-risk youth; and the median age of participants is two years higher than the IYS reference group. Caution should also be used in interpreting this program's data due to the relatively small sample size. An analysis of PTM Survey data where Link to LNX participants were removed showed that over half of the increase in 30-day use seen in the total PTM Survey percentages was caused by the inclusion of Link to LNX.. Data for GRIP Mentoring participants show increases in past 30-day use of all substances, but the increase in use of alcohol is less than in the IYS. One on One Mentoring data show increases in use of alcohol and tobacco, though the percentages are less than the IYS percentages, and One on One Mentoring data show no change (thus, no increase) in the use of marijuana.

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 3 on page 17 presents positive outcome percentages for attitudes toward alcohol, tobacco, and marijuana use for all PTM Survey participants and for participants in GRIP, One on One, and Link to LNX Mentoring programs. At least eighty percent of GRIP 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 seventy percent of PTM Survey respondents showed positive outcomes for all three substances. Less than two-thirds of Link to LNX participants improved or maintained desirable attitudes toward alcohol and tobacco use, and less than one-third maintained or increased their belief that marijuana use is wrong. In all groups, participants felt that tobacco use was more wrong than alcohol or marijuana use.

Table 3. Positive Outcome Percentages for Attitudes Toward Substance Use by Participant Group

Positive Outcome Percentages for Attitudes Toward Substance Use			
Participant Group	Alcohol	Tobacco	Marijuana
PTM Survey Participants	76%	83%	72%
GRIP Mentoring Participants	88%	91%	89%
One on One Mentoring Participants	80%	89%	87%
Link to LNX Participants	59%	63%	36%

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

Table 4 on page 18 presents positive outcome percentages for perceived risk of harm from alcohol, tobacco, and marijuana use for all PTM Survey respondents, GRIP Mentoring participants, One on One Mentoring participants, Link to LNX Mentoring participants, and K-5 Survey respondents. At least seventy-two percent of participants in all groups maintained or increased their perception of moderate to great risk of harm from using alcohol, tobacco, and drugs. In all groups (with the possible exception of the K-5 Survey respondents, as all substances are combined in one question on that instrument), participants felt that of the three substances, alcohol posed the least risk. Ninety-five percent of participants completing the K-5 Survey showed positive outcomes on perceived harm from using alcohol, tobacco, and illegal drugs.

In the Link to LNX Mentoring group, the positive outcome percentages for perceived risk of harm are notably higher for all three substances than the positive outcome percentages for their attitudes toward use of those substances and reported past 30-day use. It may be that the program is increasing participants' knowledge and perceptions of the risks of substance use, but that more time in the program may be needed to change attitudes and behaviors related to substance use for the at-risk and high-risk population served.

Table 4. 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	Tobacco	Marijuana
PTM Survey Participants	78%	86%	84%
GRIP Mentoring Participants	83%	84%	90%
One on One Mentoring Participants	77%	84%	81%
Link to LNX Participants	72%	92%	86%
K-5 Survey Participants	93%		

Finally, results of the attrition analysis indicate that participants who were not doing as well at pre-test (those who had recently used alcohol or prescription drugs not prescribed to them) tended to remain in the program this year more than did participants who had not used those substances.

The five-year, 2011, project report will provide outcomes based on the full length of participants' involvement in the mentoring programs.