Youth Development
Annual Outcome Evaluation Report
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Table of Contents

Introduction...........................................................................................................................................1

Demographics........................................................................................................................................1

Outcome Data.........................................................................................................................................2

Past 30-Day Use...................................................................................................................................3

   Table 1: Change in Past 30-Day Use: Youth Development Total and Results by Program.................................................................................................................................3

   Graph 1: Change in Past 30-Day Use: Youth Development Total and Results by Program.................................................................................................................................4

Attitudes Toward Substance Use............................................................................................................5

   Graph 2: Change in Attitudes Toward Substance Use: Youth Development........................................5

   Graph 3: Change in Attitudes Toward Substance Use: LifeSkills Training.........................................6

   Graph 4: Change in Attitudes Toward Substance Use: Project Alert....................................................7

   Graph 5: Change in Attitudes Toward Substance Use: All Stars.........................................................8

Perceived Risk of Harm from Substance Use........................................................................................9

   Graph 6: Change in Perceived Risk of Harm: Youth Development....................................................9

   Graph 7: Change in Perceived Risk of Harm: LifeSkills Training......................................................10

   Graph 8: Change in Perceived Risk of Harm: Project Alert...............................................................11

   Graph 9: Change in Perceived Risk of Harm: All Stars.................................................................12

Conclusion.............................................................................................................................................12

   Table 2: Positive Outcome Percentages for Attitudes Toward Substance Use.............................13

   Table 3: Positive Outcome Percentages for Perceived Risk of Harm from Use.............................13
Introduction

The purpose of the Youth Development 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.

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 also is administered after each year of programming for programs spanning multiple years. Post-test survey data from the previous program year is used as a baseline for reporting current year outcomes for multi-year programs. A total of 765 pre-tests and 891 first, second, and third year post-tests were collected for the Youth Development project in State Fiscal Year 2012. This resulted in a total of 747 survey matches for analysis. Of those 670 were from participants in single-year programs or in the first year of multi-year programs; and 77 were from 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?

Demographics

The median age of Youth Development project participants at post-test was eleven years. Almost all of the participants were in the fifth, sixth, or seventh grade. The sex of participants was split almost equally, with 51.2% being female. Almost one-fifth of participants were Hispanic or Latino. Participant racial groups are delineated below:

- 74.5% White;
- 3.2% Black/African American;
- 0.7% American Indian/Alaska Native;
- 0.9% Asian;
- 0.1% Native Hawaiian/Other Pacific Islander;
- 7.8% Some other race; and
- 12.8% More than one race.

**Outcome Data**

The figures included in the outcome data section detail past 30-day use, attitudes toward use, and perceptions of risk of harm from use of alcohol, cigarettes, and marijuana. Figures are provided for the project total (all participants in the Youth Development project for whom matched surveys existed in the data set), for participants in the LifeSkills Training (LST) program, for participants in Project Alert, and for participants in All Stars. Other programs did not meet the minimum sample size necessary for individual reporting, but are included in the Youth Development project totals. Those programs are: Leadership and Resiliency Program and Positive Action.

Due to the number of unmatched pre-tests (10%, possibly caused by survey administration anomalies, data entry error, early termination of programming, or ID assignment mistakes) an attrition analysis was performed on these data. There were no significant differences found between those youth who completed a 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 biannual census assessment of Iowa’s secondary school-age students’ (grades 6, 8, and 11) 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 based on survey results from sixth and eighth graders. Thus, IYS data serve as a general point of reference when examining Youth Development program outcomes (change from pre-test to post-test) rather than comparing program percentages to zero, or no change. (Note: Youth who participated in Youth Development programming may also have completed the IYS).
Past 30-Day Use

Table 1, below, and Graph 1, on page 4, present data on past 30-day use of alcohol, cigarettes, and marijuana, as well as binge drinking for all Youth Development participants (YD Total), for LifeSkills Training participants, for Project Alert participants, and for All Stars participants. A positive (+) percent change indicates an increase in use; whereas a negative (-) change indicates a decrease in use. A few decreases occurred, most notably a decrease in reported alcohol use by LifeSkills Training participants. All increase percentages are lower than the IYS percentages except for marijuana use amongst Project Alert participants. The 2.94 percentage point increase in binge drinking for All Stars was an actual change of 1 respondent.

Table 1. Change in Past 30-Day Use: Youth Development Total and Results by Program

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Median Age</th>
<th>Alcohol</th>
<th>Binge Drinking</th>
<th>Cigarettes</th>
<th>Marijuana</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test %</td>
<td>Change</td>
<td>Pre-Test %</td>
<td>Change</td>
<td>Pre-Test %</td>
<td>Change</td>
</tr>
<tr>
<td>Iowa Youth Survey¹</td>
<td>53,971²</td>
<td>12</td>
<td>–</td>
<td>+4.50</td>
<td>–</td>
<td>+3.00</td>
</tr>
<tr>
<td>Youth Development</td>
<td>724</td>
<td>11</td>
<td>4.70</td>
<td>-0.28</td>
<td>1.05</td>
<td>+0.30</td>
</tr>
<tr>
<td>LifeSkills Training</td>
<td>402</td>
<td>11</td>
<td>5.24</td>
<td>-1.75</td>
<td>0.74</td>
<td>+0.50</td>
</tr>
<tr>
<td>Project Alert</td>
<td>212</td>
<td>12</td>
<td>2.82</td>
<td>+2.81</td>
<td>0.94</td>
<td>-0.47</td>
</tr>
<tr>
<td>All Stars</td>
<td>34</td>
<td>12</td>
<td>2.15</td>
<td>+1.08</td>
<td>0</td>
<td>+2.94</td>
</tr>
</tbody>
</table>

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 2010 Iowa Youth Survey, State of Iowa report (Questions B30, Any Tobacco Use from ATOD section, and B31).
² The total number of 6th graders completing the 2010 Iowa Youth Survey was 26,856; the total number of 8th graders was 27,115.
Graph 1. Change in Past 30-Day Use: Youth Development Total and Results by Program

Key

<table>
<thead>
<tr>
<th>YD Total</th>
<th>All Youth Development Participants</th>
<th>AS</th>
<th>All Stars</th>
</tr>
</thead>
<tbody>
<tr>
<td>LST</td>
<td>LifeSkills Training</td>
<td>IYS</td>
<td>2010 Iowa Youth Survey</td>
</tr>
<tr>
<td>PA</td>
<td>Project Alert</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Attitudes Toward Substance Use**

Graphs 2 through 5 on pages 5 through 8 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. Graphs 2 through 5 show data for all Youth Development project participants, LifeSkills Training participants, Project Alert participants, and All Stars participants, respectively. The number of matched pre- and post-tests containing a response to the question is shown in the data table following each substance.

**Graph 2. Change in Attitudes Toward Substance Use: Youth Development**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Improved</th>
<th>Maintained +</th>
<th>Maintained -</th>
<th>Worsened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol (N = 737)</td>
<td>9.0</td>
<td>78.3</td>
<td>1.1</td>
<td>11.7</td>
</tr>
<tr>
<td>Cigarettes (N = 672)</td>
<td>7.9</td>
<td>80.7</td>
<td>0.9</td>
<td>10.6</td>
</tr>
<tr>
<td>Marijuana (N = 657)</td>
<td>3.0</td>
<td>90.7</td>
<td>0.8</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Youth Development project participants showed positive outcomes as follows: Alcohol – 87%; Cigarettes – 89%; and Marijuana – 94%.
LifeSkills Training participants showed positive outcomes as follows: Alcohol – 90%; Cigarettes – 91%; and Marijuana – 96%.
Graph 4. Change in Attitudes Toward Substance Use: Project Alert

Project Alert participants showed positive outcomes as follows: Alcohol – 86%; Cigarettes – 85%; and Marijuana – 93%.
Graph 5. Change in Attitudes Toward Substance Use: All Stars

How wrong do you think it is for someone your age to use...

<table>
<thead>
<tr>
<th>Attitude Change from Pre- to Post-Test</th>
<th>Alcohol (N = 93)</th>
<th>Cigarettes (N = 33)</th>
<th>Marijuana (N = 33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved</td>
<td>7.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Maintained +</td>
<td>82.8</td>
<td>84.9</td>
<td>93.9</td>
</tr>
<tr>
<td>Maintained -</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Worsened</td>
<td>9.7</td>
<td>15.2</td>
<td>6.1</td>
</tr>
</tbody>
</table>

All Stars participants showed positive outcomes as follows: Alcohol – 90%; Cigarettes – 85%; and Marijuana – 94%.
Perceived Risk of Harm from Substance Use

Graphs 6 through 9 on pages 9 through 12 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. Graphs 6 through 9 show data for all Youth Development project participants, LifeSkills Training participants, Project Alert participants, and All Stars participants, respectively. The number of matched pre- and post-tests containing a response to the question is shown in the key, following each substance.

Graph 6. Change in Perceived Risk of Harm: Youth Development

Youth Development project participants showed positive outcomes as follows: Alcohol – 78%; Cigarettes – 81%; and Marijuana – 72%.
Graph 7. Change in Perceived Risk of Harm: LifeSkills Training

LifeSkills Training participants showed positive outcomes as follows: Alcohol – 82%; Cigarettes – 86%; and Marijuana – 76%.
Graph 8. Change in Perceived Risk of Harm: Project Alert

Project Alert participants showed positive outcomes as follows: Alcohol – 70%; Cigarettes – 73%; and Marijuana – 68%.
All Stars participants showed positive outcomes as follows: Alcohol – 88%; Cigarettes – 85%; and Marijuana – 64%.

**Conclusion**

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

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

All programs showed an increase in substance use from pre-test to post-test, with four exceptions: a decrease in reported alcohol use by LifeSkills Training participants; a decrease in reported binge drinking by Project Alert participants; and no change in reported cigarette or marijuana use by All Star participants. All the increases are lower than the IYS percentages. 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 on the following page presents positive outcome percentages for attitudes toward alcohol, cigarettes, and marijuana use for all Youth Development participants, LifeSkills Training Participants, Project Alert Participants, and All Stars participants. At least 85% 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, participants felt that marijuana use was more wrong than alcohol or cigarette use.

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

<table>
<thead>
<tr>
<th>Participant Group</th>
<th>Alcohol</th>
<th>Cigarettes</th>
<th>Marijuana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Development Participants</td>
<td>87%</td>
<td>89%</td>
<td>94%</td>
</tr>
<tr>
<td>LifeSkills Training Participants</td>
<td>90%</td>
<td>91%</td>
<td>96%</td>
</tr>
<tr>
<td>Project Alert Participants</td>
<td>86%</td>
<td>85%</td>
<td>93%</td>
</tr>
<tr>
<td>All Stars Participants</td>
<td>90%</td>
<td>85%</td>
<td>94%</td>
</tr>
</tbody>
</table>

*Has perceived risk of harm from alcohol/cigarettes/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 use of alcohol, cigarettes, and marijuana for all Youth Development participants, LifeSkills Training Participants, Project Alert Participants, and All Stars participants. At least 64% 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).

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

<table>
<thead>
<tr>
<th>Participant Group</th>
<th>Alcohol</th>
<th>Cigarettes</th>
<th>Marijuana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Development Participants</td>
<td>78%</td>
<td>81%</td>
<td>72%</td>
</tr>
<tr>
<td>LifeSkills Training Participants</td>
<td>82%</td>
<td>86%</td>
<td>76%</td>
</tr>
<tr>
<td>Project Alert Participants</td>
<td>70%</td>
<td>73%</td>
<td>68%</td>
</tr>
<tr>
<td>All Stars Participants</td>
<td>88%</td>
<td>85%</td>
<td>64%</td>
</tr>
</tbody>
</table>