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YOUTH DEVELOPMENT
PROGRAM EVALUATION

ANNUAL REPORT

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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. Nine substance abuse prevention organizations participate in this project: Clinton Substance Abuse Council; Community and Family Resources; Henry County Extension; Jackson Recovery Centers; Loess Hills Area Education Agency; Mason City Youth Task Force; Substance Abuse Treatment Unit of Central Iowa; United Action for Youth; and Youth and Shelter Services.

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 439 pre-tests and 1,668 first, second, third, and fourth year post-tests were collected for the Youth Development project in State Fiscal Year 2011. This resulted in a total of 1,353 survey matches for analysis. Of those, 367 were from participants in single-year programs and participants in the first year of multi-year programs; 485 were from participants in the second year of multi-year programs; 327 were from participants in the third year of multi-year programs; and 174 were from participants in the fourth year of multi-year programs.

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

- Has alcohol/tobacco/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/tobacco/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 thirteen years. More than two-thirds of participants were in the sixth and seventh grades. The sex of participants was split almost equally, with 50.1% being female. More than one quarter of participants were Hispanic or Latino. Participant racial groups are delineated below:

- 75.9% White;
- 3.4% Black/African American;
- 1.5% American Indian/Alaska Native;
• 1.1% Asian;
• 0.2% Hawaiian/Other Pacific Islander;
• 0.2% Arab American; and
• 17.9% 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, tobacco, and marijuana. (Please note: the past 30-day use questions for tobacco include cigarettes, snuff, and cigars, whereas the attitude and perceived risk questions include only cigarettes.) 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 Reconnecting Youth. 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; Teen Club; Service Learning Initiative Project (SLIP); AlcoholEDU, and Positive Action.

Due to the number of unmatched pre-tests (17%, 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. Age, grade, 30-day cigarette use, and attitude toward alcohol use had statistically significant associations with whether an individual completed a post-test (Cochran-Mantel-Haenszel tests, p<0.05). Older participants, based on both age and grade, were more likely to drop out of programming or not complete a post-test. Participants reporting cigarette use in the past 30 days tended to drop out of programming or not complete a post-test. There also was a slight tendency for participants who thought marijuana use was not risky or only slightly risky to drop out or not complete a post-test. Therefore, findings may apply only to those youth who completed the program and completed a post-test, rather than all participants.

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. 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, tobacco, and marijuana for all Youth Development participants (YD Total), for LifeSkills Training participants, for Project Alert participants, and for Reconnecting Youth participants. A positive (+) percent change indicates an increase in use; whereas a negative (-) change indicates a decrease in use. All programs showed an increase across substances. However, all increase percentages are lower than the IYS percentages except for marijuana use amongst Reconnecting Youth participants.

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 Pre-Test %</th>
<th>Change</th>
<th>Tobacco Pre-Test %</th>
<th>Change</th>
<th>Marijuana Pre-Test %</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>IYS</td>
<td>53,971</td>
<td>12</td>
<td>–</td>
<td>+4.50</td>
<td>–</td>
<td>+2.50</td>
<td>–</td>
<td>+1.50</td>
</tr>
<tr>
<td>YD Total</td>
<td>1,336</td>
<td>13</td>
<td>7.11</td>
<td>+2.10</td>
<td>2.85</td>
<td>+0.60</td>
<td>1.80</td>
<td>+0.60</td>
</tr>
<tr>
<td>LST</td>
<td>1,011</td>
<td>12</td>
<td>4.95</td>
<td>+2.97</td>
<td>0.79</td>
<td>+0.70</td>
<td>0.79</td>
<td>+0.40</td>
</tr>
<tr>
<td>PA</td>
<td>176</td>
<td>12</td>
<td>0.57</td>
<td>+1.70</td>
<td>0</td>
<td>+1.14</td>
<td>0</td>
<td>+1.14</td>
</tr>
<tr>
<td>RY</td>
<td>67</td>
<td>15</td>
<td>47.76</td>
<td>+1.49</td>
<td>29.85</td>
<td>+1.49</td>
<td>20.00</td>
<td>+1.54</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 Iowa Youth Survey was 26,856; the total number of 8th graders was 27,115.

Key

<table>
<thead>
<tr>
<th>IYS</th>
<th>Iowa Youth Survey</th>
<th>PA</th>
<th>Project Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>YD Total</td>
<td>All Youth Development Participants</td>
<td>RY</td>
<td>Reconnecting Youth</td>
</tr>
<tr>
<td>LST</td>
<td>LifeSkills Training</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Graph 1. Change in Past 30-Day Use: Youth Development Total and Results by Program

Key

<table>
<thead>
<tr>
<th>YD Total</th>
<th>LST</th>
<th>PA</th>
<th>RY</th>
<th>IYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Youth Development Participants</td>
<td>LifeSkills Training</td>
<td>Project Alert</td>
<td>Reconnecting Youth</td>
<td>2010 Iowa Youth Survey</td>
</tr>
</tbody>
</table>

Legend:
- Alcohol
- Tobacco
- Marijuana
**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, 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. Graphs 2 through 5 show data for all Youth Development project participants, LifeSkills Training participants, Project Alert participants, and Reconnecting Youth 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**

![Graph showing the percentage of respondents by attitude change from pre- to post-test for alcohol, cigarettes, and marijuana](image)

Youth Development project participants showed positive outcomes as follows: Alcohol – 74%; Cigarettes – 85%; and Marijuana – 78%.
LifeSkills Training participants showed positive outcomes as follows: Alcohol – 72%; Cigarettes – 83%; and Marijuana – 76%.
Graph 4. Change in Attitudes Toward Substance Use: Project Alert

<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 = 183)</td>
<td>7.65</td>
<td>78.14</td>
<td>1.09</td>
<td>13.11</td>
</tr>
<tr>
<td>Cigarettes (N = 183)</td>
<td>3.28</td>
<td>91.26</td>
<td>0</td>
<td>5.46</td>
</tr>
<tr>
<td>Marijuana (N = 185)</td>
<td>6.49</td>
<td>85.95</td>
<td>0</td>
<td>7.57</td>
</tr>
</tbody>
</table>

Attitude Change from Pre- to Post-Test

Project Alert participants showed positive outcomes as follows: Alcohol – 86%; Cigarettes – 95%; and Marijuana – 92%.
Graph 5. Change in Attitudes Toward Substance Use: Reconnecting Youth

Reconnecting Youth participants showed positive outcomes as follows: Alcohol – 54%; Cigarettes – 67%; and Marijuana – 45%. Reconnecting Youth is a program that serves high school age students who tend to be higher risk for substance use than the general population.
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, 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. Graphs 6 through 9 show data for all Youth Development project participants, LifeSkills Training participants, Project Alert participants, and Reconnecting Youth 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 – 73%; Cigarettes – 77%; and Marijuana – 80%.
Graph 7. Change in Perceived Risk of Harm: LifeSkills Training

LifeSkills Training participants showed positive outcomes as follows: Alcohol – 69%; Cigarettes – 75%; and Marijuana – 79%.
Project Alert participants showed positive outcomes as follows: Alcohol – 85%; Cigarettes – 85%; and Marijuana – 94%.
Reconnecting Youth participants showed positive outcomes as follows: Alcohol – 67%; Cigarettes – 75%; and Marijuana – 52%. Reconnecting Youth is a program that serves high school age students who tend to be higher risk for substance use than the general population.

**Conclusion**

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

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

All programs showed an increase across substances. However, all increase percentages are lower than the IYS percentages except for marijuana use amongst Reconnecting Youth participants. 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, tobacco, and marijuana use for all Youth Development participants, LifeSkills Training Participants, Project Alert Participants, and Reconnecting Youth participants. At least 70% of participants in programs that served middle school age...
youth 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. At least 85% of Project Alert participants maintained or increased positive attitudes regarding use of all three substances. Reconnecting Youth participants did not think it was as wrong to use any of the substances as their younger counterparts. In all groups, participants felt that tobacco use was more wrong than alcohol or marijuana use.

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 (%)   |
| Youth Development Participants  | 74%             | 85%             | 78%             |
| LifeSkills Training Participants| 72%             | 83%             | 76%             |
| Project Alert Participants      | 86%             | 95%             | 92%             |
| Reconnecting Youth Participants | 54%             | 67%             | 45%             |

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

Table 3 on the following page presents positive outcome percentages for perceived risk of harm from use of alcohol, tobacco, and marijuana for all Youth Development participants, LifeSkills Training Participants, Project Alert Participants, and Reconnecting Youth participants. At least 69% of participants in all groups maintained or increased positive responses regarding perception of risk of harm from substance use (i.e., that using alcohol, cigarette, or marijuana posed moderate to great risk of harm). Project Alert participants appeared to fare the best, with at least 85% maintained or increased positive responses for all three substances. Reconnecting Youth participants did not think it was as risky to use any of the substances as their younger counterparts. In three of the four groups, participants felt that alcohol use was less risky than tobacco or marijuana use.
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>Tobacco</th>
<th>Marijuana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Development Participants</td>
<td>73%</td>
<td>77%</td>
<td>80%</td>
</tr>
<tr>
<td>LifeSkills Training Participants</td>
<td>69%</td>
<td>75%</td>
<td>79%</td>
</tr>
<tr>
<td>Project Alert Participants</td>
<td>85%</td>
<td>85%</td>
<td>94%</td>
</tr>
<tr>
<td>Reconnecting Youth Participants</td>
<td>67%</td>
<td>75%</td>
<td>52%</td>
</tr>
</tbody>
</table>