

The Impact of School-Based Tobacco and Substance Abuse Prevention Education in Maine (1998-2002)

Final Report: Executive Summary

Under contract with The Spurwink Center for Research at the University of New England, Public Health Resource Group (PHRG) served as independent evaluator to a collaborative effort, funded primarily by the Bingham Foundation of Maine, to assess the effectiveness of the Leadership Decisions Institute (LDI) curriculum. The primary objective of the evaluation was to determine whether LDI, used alone or in combination with the Life Skills Training (LST) program, is effective in reducing the onset of alcohol, tobacco and other drug use (ATOD) among middle school students in Maine. The study tracked outcomes among 6th grade students from 25 middle schools across Southern, Central and Northern Maine as they graduated to the 7th grade and through the 8th grade. Overall, study findings suggest that the LDI program is a promising intervention for successfully reducing tobacco and other forms of substance abuse among students as they age.¹

Key findings showed that:

- ❖ Participation in the LDI program was associated with smaller age-related increases in several forms of habitual tobacco use as well as in the use of inhalants;
- ❖ When combined with the LST program, the LDI program was effective in reducing age-related increases in marijuana use and improvements in drug refusal skills and behavior; and
- ❖ LDI participation, alone or in combination with the LST program, had no effects on alcohol use; drug and alcohol knowledge; changing attitudes toward alcohol and drugs; or improving skills in drug refusal strategies, decision-making, assertiveness, advertising resistance, anxiety reduction, cooperation, communication or compromise.

Background

The evaluation took place over four years. During that time period, we conducted multiple assessments of study outcomes among students who were exposed to either 1) the LDI program only, 2) the LST program only, 3) both the LDI and LST programs or 4) neither program in the sixth, seventh and eighth grades. Regular classroom teachers delivered the LST curriculum. The LDI intervention was delivered on-site over a three-day period by professional educators trained at Camp Kieve.

The evaluation survey measured outcomes in several domains: a) historical and current use of alcohol, tobacco and other illicit drugs (ATOD), b) future intentions to use ATOD, c) ATOD knowledge, attitudes and normative expectations (i.e., beliefs about how normative it is to use ATOD), d) drug-resistance and social influence resistance skills (i.e., assertiveness, decision-making skill, advertising resistance), e) negotiation and communication skills, f) general life

¹ A more detailed report of study methodology and findings is available from PHRG (www.phrg.com) or the Leadership Decisions Institute at Camp Kieve.

skills (e.g., anxiety reduction) and g) self-confidence.² Standardized questions were used to assess all evaluation outcomes. The survey was completed at the beginning of the sixth grade prior to the implementation of any prevention curriculum (Wave 1), the end of the sixth grade (Wave 2), the end of the seventh grade (Wave 3) and the end of the eighth grade year (Wave 4).

Findings for the LDI-Only Intervention showed that Wave 1 to Wave 4 increases in regular smoking (i.e., ever smoked daily for at least 30 days) and current frequent smoking (i.e., smoked on 20 or more of the past 30 days) were significantly smaller and more gradual in the LDI-only group than in the control group. In addition, the proportion of students who reported monthly or more frequent use of inhalants increased at a significantly lower rate in the LDI-only group than in the control group. All other findings for the LDI-only group were either not statistically significant or were counter to prediction.

Exposure to the LST-only intervention was not significantly associated with any preventive effects on measures of alcohol and illicit drug use or improvements in attitudes, knowledge or skills compared to the control group.

Exposure to both LDI and LST was associated with favorable trends on a number of intermediate outcomes that are expected to have positive prevention effects. For example, intentions to refrain from alcohol and marijuana use showed significantly smaller declines over time in the LDI/LST group compared to the control group. In addition, students in the LDI/LST group became more likely over the study period to report that they would refuse alcohol, tobacco and other drugs if offered to them. Students in the control group became less likely over the study period to make such reports.

Participation in both the LDI and LST programs was also associated with smaller age-related increases in lifetime cigarette use, regular cigarette smoking, and current smokeless tobacco use compared to participation in the LDI program only. Intentions to refrain from alcohol and marijuana use also showed significantly smaller declines over time in the LDI/LST group than in the LDI-only group. Likewise, increases in pro-marijuana attitudes were less steep in the LDI/LST group compared to LDI-only. Moreover, students in the LDI/LST group showed stronger improvements in ATOD resistance and resistance skills compared to their LDI-only counterparts.

The findings from this study provide preliminary evidence that the LDI program is effective in preventing certain forms of tobacco and illicit drug use among middle school students in Maine, particularly when combined with concurrent exposure to the LST program. As such, they should be used in support of applications for additional grant funding to further evaluate the LDI curriculum and the mechanisms underlying its effectiveness.

² For Group 2, we used the data on substance abuse and life skills that were already being collected by the State of Maine.