LifeSkills Training Program and Positive Educational Outcomes

LST Program Description
- ➢ **LifeSkills Training (LST)** is an evidence-based substance abuse and violence prevention program designed to be implemented in Middle/Junior High School classrooms. LST incorporates age-appropriate and culturally relevant information, facilitated discussion, and structured activities in 30 class sessions across 3 years. LST was developed by Dr. Gilbert J. Botvin, Professor of Public Health and Psychiatry and Director of Cornell University's Institute for Prevention Research.
- ➢ In addition to helping youth resist drug, alcohol, and tobacco use, LST effectively helps to reduce violence and other high-risk behaviors. LST has not been evaluated specifically in terms of academic outcomes. However, objectives and components comprising LST have been linked in other research to positive educational outcomes. The purpose of this document is to present these findings.

Drug Use and School Attendance/Academic Achievement

Research Findings	Corresponding LST Components
Years of completed schooling predicts important long-term social and economic outcomes, including differences in wage earnings based on education level attained (the "education premium").	The Drug-Related Information and Skills component of LST targets adolescent substance use directly through increasing students' information about consequences of drug use, normative levels of use, declining social acceptability of use, physiological effects, and media pressures to use. The program also teaches students substance use resistance skills. LST incorporates specific lessons and activities to help students with anxiety reduction and stress management, which may in turn impact school attendance.
Reductions in frequency of alcohol, stimulants, and other drug use, and the elimination of marijuana use, each independently increase the likelihood of school attendance. Additionally, earlier age of first substance use, and higher scores obtained on an index of anxiety, each predict lower school attendance. Results suggest that effective adolescent substance use programs may, in addition, have positive effects on school attendance as well as social and economic benefits that accompany school attainment. These findings have important implications for the cost-effectiveness of adolescent substance use intervention programs.	
	Results consistently show that LST can cut significantly adolescent tobacco, alcohol, and marijuana use initiation; reduce smoking, drinking, drunkenness, inhalant use, and polydrug use; and prevent cigarette smoking, marijuana use, and immoderate alcohol use.
There is a negative relationship between specific health-risk behaviors - including tobacco use, alcohol and other drug use, violence-related behaviors, and sexual risk behaviors - and academic achievement in high school.	Research demonstrates a link between LST participation, reduction in growth of alcohol and marijuana intoxication, and in turn, reduction in later HIV risk behavior.
	Finally, research has shown that LST can be effective in reducing violence and delinquency in adolescence.
	In addition to reducing substance use, LST can have a direct, positive effect on the cognitive, attitudinal, and personality factors thought to play a part in substance use among adolescents.

Successful Transition to High School

Research Findings	Corresponding LST Components
The transition to high school may be a challenge for students, both academically and socially. Healthy strategies for coping with problems, planning skills, and problem-solving skills are among the factors identified as instrumental in students making a successful transition from middle school to high school. Researchers recommend that middle schools foster these skills by providing students with opportunities to improve life skills, by coaching and discussion to learn coping skills, and via programs designed to strengthen social skills.	LST is implemented in Middle School/Junior High, in the years immediately preceding students' transition to high school. The Personal Self-Management Skills component of LST fosters the development of problem-solving skills through facilitated discussion and structured classroom activities, including brainstorming problem situations, generating alternatives and evaluating consequences, considering factors influencing decision-making, goal-setting, and learning and applying principles of personal behavior change.

Social Skills

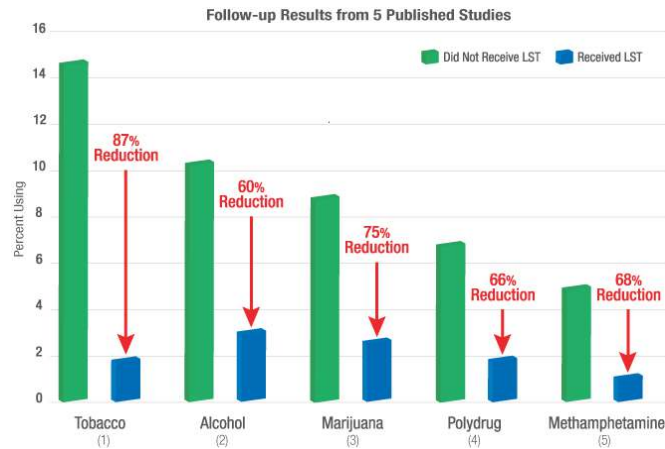| Research Findings	Corresponding LST Components
A growing body of research demonstrates that enhanced social and emotional behaviors can strongly impact success in school, and ultimately, in life. Learning is a social process, and it is important for schools to attend to social and emotional factors, which play a critical role in education. Social and emotional education from this perspective involves "teaching children to be self-aware, socially cognizant, able to make responsible decisions, and competent in self-management and relationship-management skills so as to foster their academic success."	The Social Skills component of LST is designed to impact on several important social skills and to enhance social competence. This component incorporates facilitated discussion, structured activities, and behavioral rehearsal. Program material emphasizes teaching: 1) communication skills; 2) general social skills; 3) skills related to dating relationships; and 4) verbal and nonverbal assertiveness.
A review of intervention programs indicates that programs successful with adolescents at risk for substance abuse, unintended pregnancy, delinquency, and school dropout have in common, among other features, a social skills training component and engagement of peers in the interventions.	Social Skills units teach and provide practice in making social contacts, giving and receiving compliments and other feedback, effective listening, being persistent, having self-awareness, feelings toward others, communication, conversation, and creative thinking.
A reciprocal relationship between social competence and academic achievement in elementary school indicates that positive social behaviors are related to later academic competence over time.	Communication units teach youth how to communicate effectively by using verbal and non-verbal communication, techniques for avoiding misunderstandings, clarifying, asking questions, paraphrasing, and being specific.
Intervention incorporating developmentally appropriate social competence training for children, parent skills training, and in-service training for teachers in using cognitive and social skills training results in reductions in violent delinquent acts, heavy drinking, sexual intercourse, having multiple sex partners, pregnancy, and school misbehavior and increases in commitment and attachment to school and academic achievement.	Assertiveness units emphasize reflecting on actions takes, types of responses, consequences, decision-making, awareness of persuasive tactics, repertoire of refusal responses, verbal and non-verbal assertiveness, self-respect, planning, and goal setting. LST has been demonstrated to increase interpersonal skills and communication skills in adolescents.
Positive preventive behavioral interventions and enhancing students' skills in self-management are two factors identified as instrumental in preventing antisocial behavior.	

Personal Self-Management Skills

Research Findings	Corresponding LST components
Socially responsible behavior and self-regulatory processes (goal setting, interpersonal trust, and problem-solving styles) are significantly related to grade point average in middle school students.	The Personal Self-Management component of LST is designed to: 1) foster decision-making and problem-solving skills; 2) teach skills for identifying, analyzing, and resisting media influences; 3) teach students self-control skills to cope with anxiety and anger; 4) and provide students with skill in goal-setting, self-monitoring, and self-reinforcement.
Providing students with the skills to set specific goals increases self-efficacy for learning, which raises school performance and leads to better skill acquisition.	
The CDC labels social-cognitive approaches as a best practice for violence prevention. Social-cognitive models emphasize learning, thinking, and reasoning, and match the school agenda of promoting knowledge acquisition and cognitive development.	LST uses interpersonal cognitive problem solving to teach youth how to think about social situations and manage their own behavior.
Individuals who learn goal-setting skills become more challenge seeking and respond better to failure when faced with it.	Examples of LST activities designed to promote self-management skills include: 1) guided stress management and relaxation training; 2) brainstorming problem situations and considering alternatives and consequences ; 3) considering how decisions individuals make are influenced by others; and 4) completing a self-improvement project, involving setting specific goals and objectives, and working on that project throughout the program.
Social-emotional competence fosters academic performance. Specifically, students who set goals, motivate themselves, and manage their stress levels perform better in school. Multiyear and multicomponent programs produce the longest lasting benefits.	
Cognitive-behavioral interventions show significant improvement in on-task classroom behavior.	

School Connectedness

Research Findings	Corresponding LST Components
School connectedness may be defined as students' belief that adults and peers in the school care about their learning and about them as individuals. Research shows: 1) a strong relationship between school connectedness and educational outcomes including school attendance, staying in school longer, and higher grades and test scores; and 2) academically successful students are less likely to engage in risky behavior.	LST aligns with steps identified by the CDC to promote school connectedness by providing students with academic, emotional, and social skills to be actively engaged in school. CDC-recommended action steps that are addressed explicitly in LST include:
Research indicates links between a positive school environment and improved academic performance and between students' perceived protective factors (e.g., caring relationships, high expectations, and the opportunity to participate) and test scores.	• Providing opportunities for students to improve their interpersonal skills, such as problem-solving, conflict resolution, self-control, communication, and negotiation. • Teaching refusal and resistance skills, including how to recognize social influences, identify consequences of problem behaviors, and generate alternatives.
The best outcomes are associated with having both good school connectedness and good social connectedness, but students who have good social connectedness but low school connectedness are may be at increased risk for anxiety/depressive symptoms.	• Teaching listening, stress management, and decision making skills. • Correcting inaccurate perceptions about what normal behaviors are among students, e.g., number of students who smoke or use alcohol.
Enhancing the social environment of students can increase school bonding, which in turn may enhance academic achievement and reduce problem behavior.	• Engaging students in planning and identifying steps to meet their goals.

Reductions in Adolescent Substance Use Following LST Participation

Importance of LST as an Evidence-Based Program (EBP)
- LST is an evidence-based program, shown to be effective in multiple studies involving randomized control-group design.
- EBPs produce sizeable effects in well-designed and implemented randomized or matched control group studies. Two common features of EBPs are a high degree of structure or manualization, and monitoring to ensure the program is implemented with fidelity.
- Because some programs are ineffective, or even harmful, we are obligated to do what we *know* is effective. EBPs have a high likelihood of improving the health and well-being of participants.
- EBPs offer well-packaged program materials, staff training, and technical assistance.
- EBPs provide meaningful accountability of scarce community resources. Information increasingly is available that the financial benefits of EBPs outweigh their costs.
- The demonstrated effectiveness of EBPs can help in securing support from funding agencies, policy makers, and community leaders.

Cost Effectiveness
- Washington State Institute for Public Policy reports $25.61 in benefits per $1 spent in implementing LST.
- Similarly, research at Pennsylvania State University reports $25.72 in benefits per $1 spent, with an estimated $16,160,000 in potential economic benefit statewide.
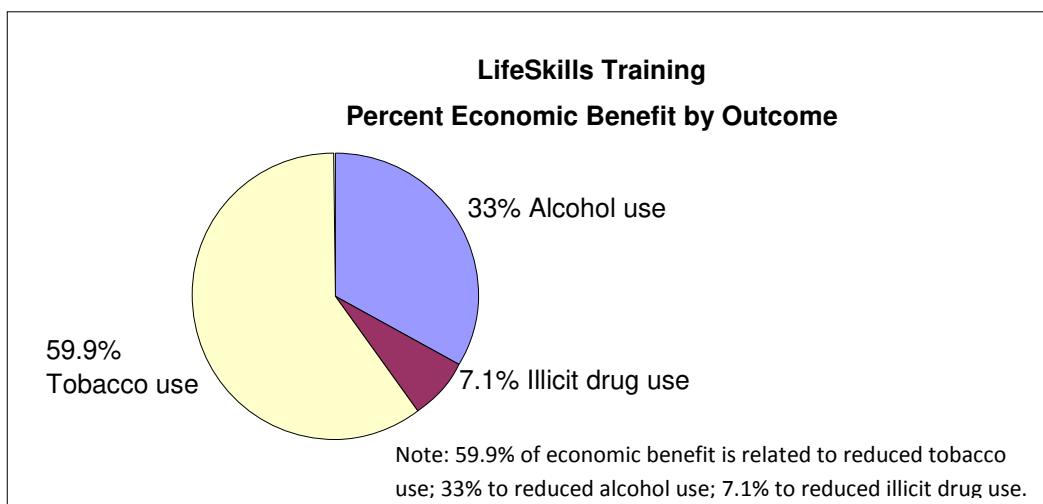
References Available Upon Request

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