
For Violence Prevention

BOOK FIVE
Life Skills
Training

# *Blueprints* for Violence Prevention

## LIFE SKILLS TRAINING

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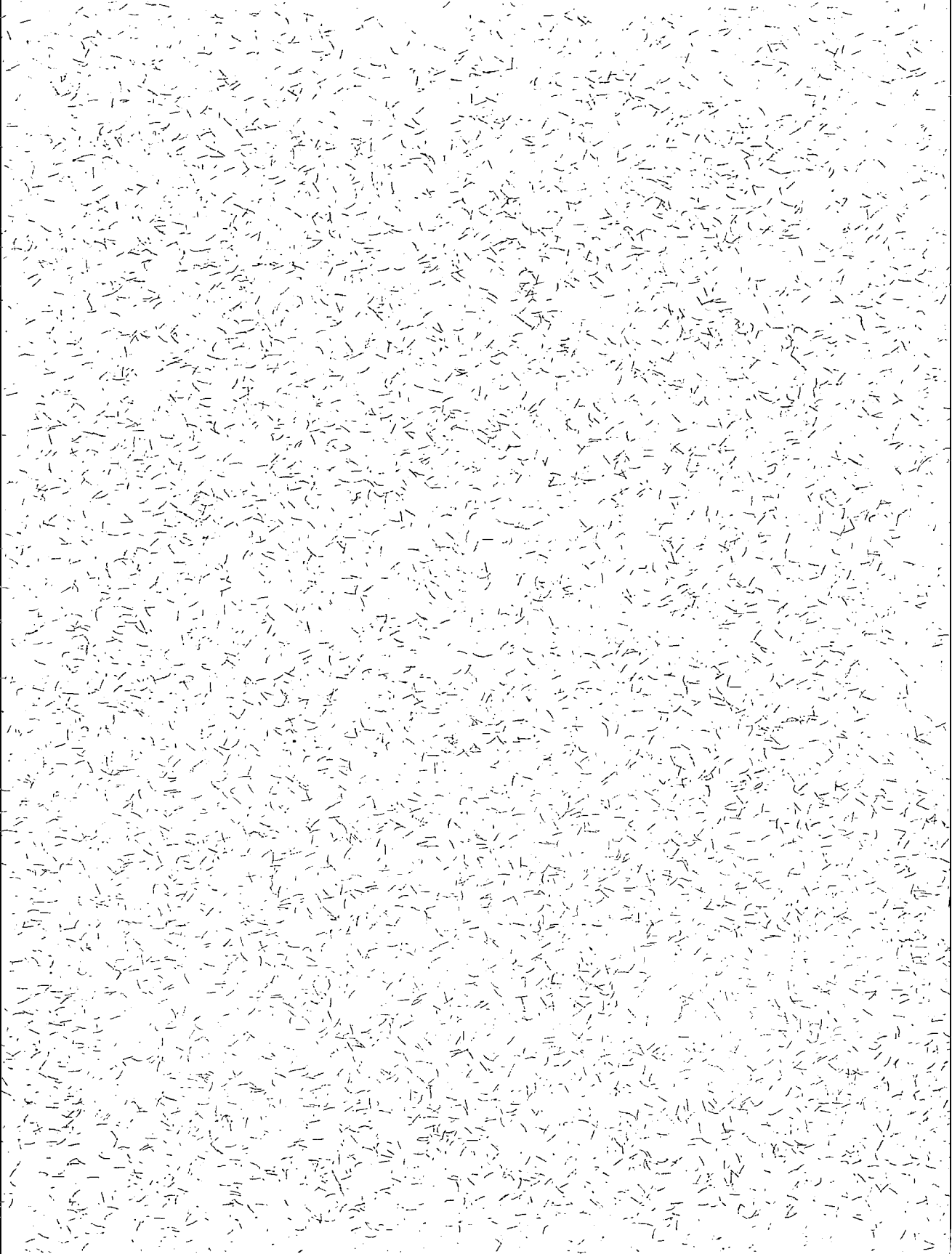

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# Blueprints






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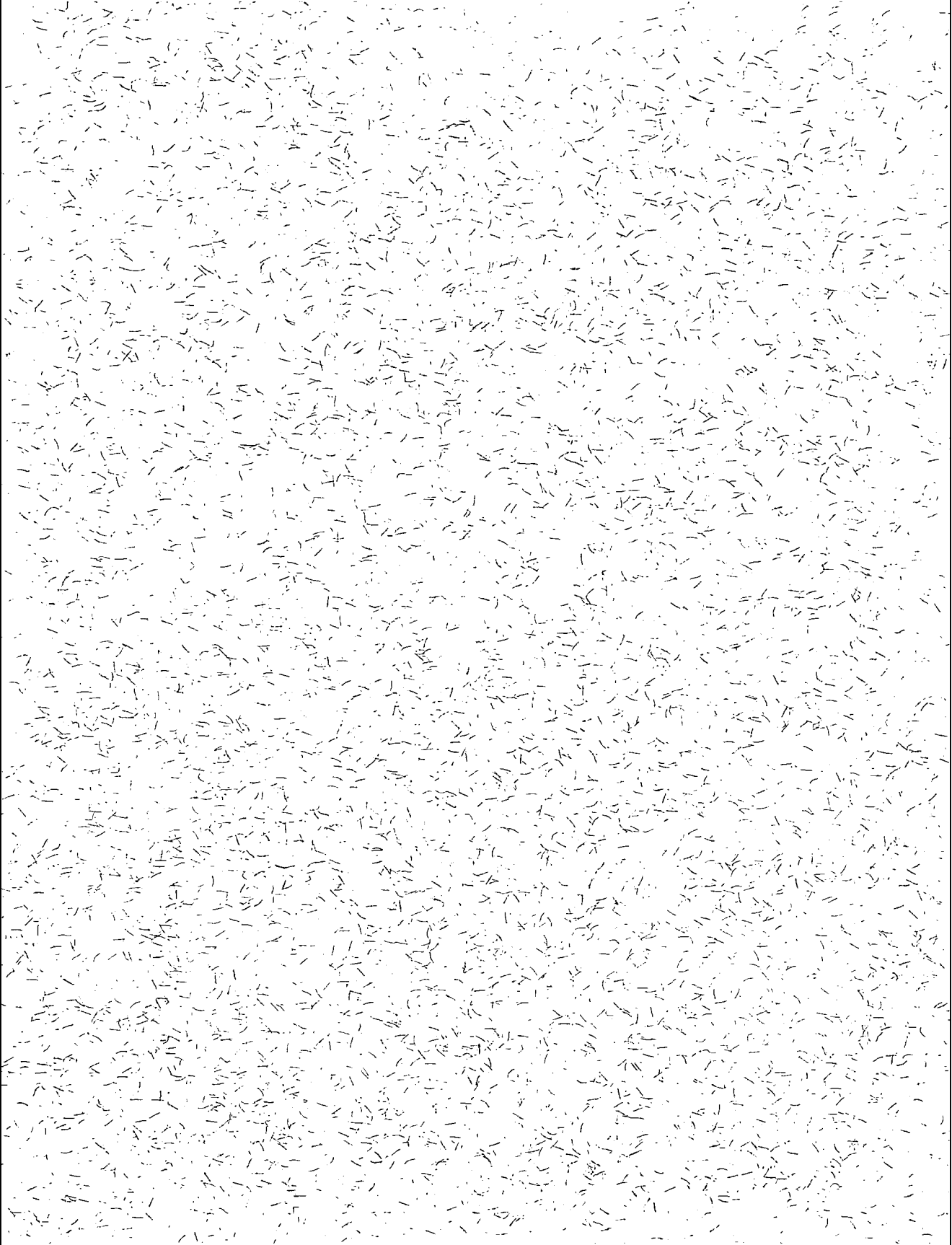

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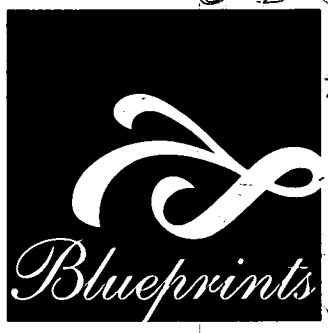
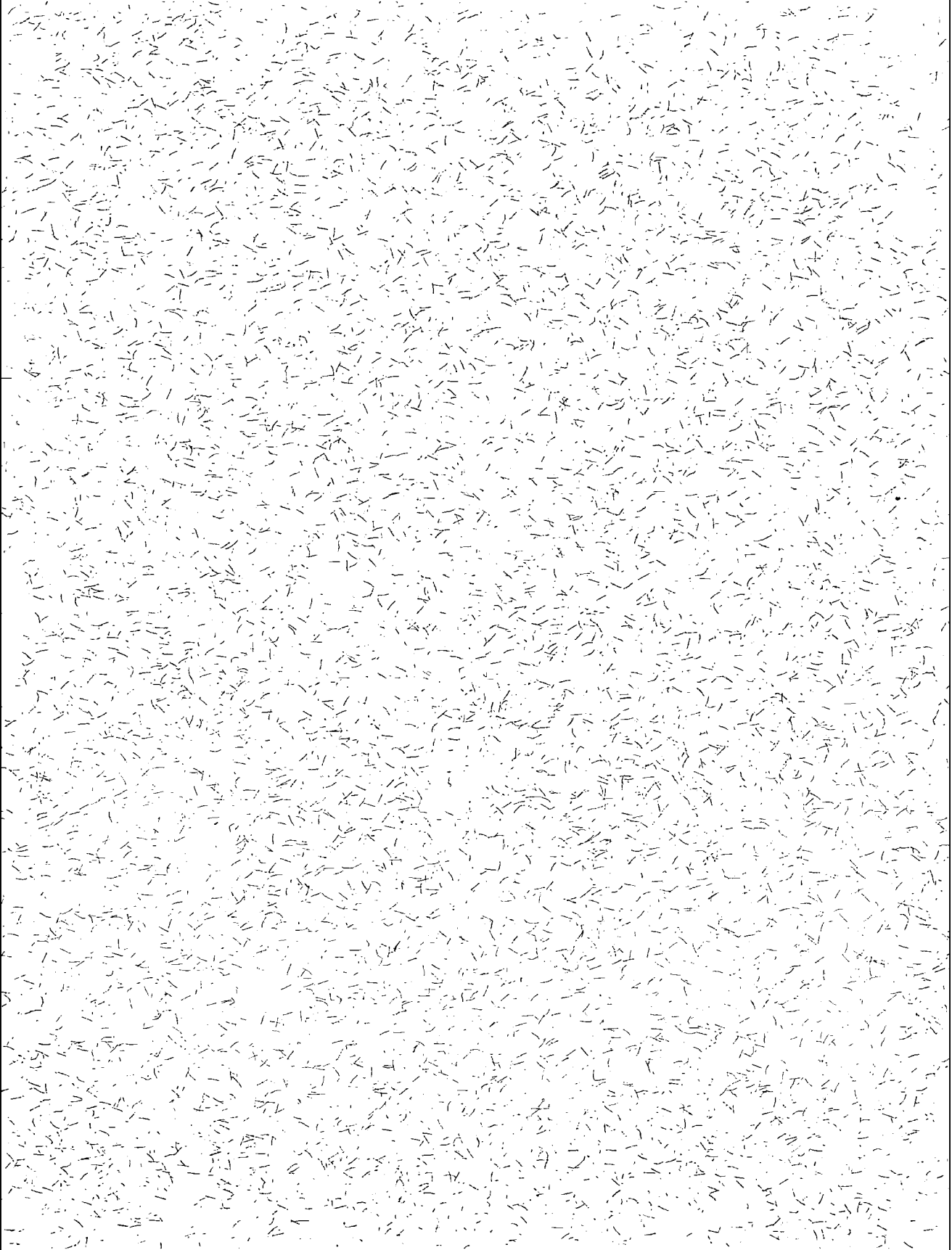




# EDITOR'S INTRODUCTION

## Introduction

The demand for effective violence and crime prevention programs has never been greater. As our communities struggle to deal with the violence epidemic of the 1990s in which we have seen the juvenile homicide rate double and arrests for serious violent crimes increase 50 percent between 1984 and 1994,[1] the search for some effective ways to prevent this carnage and self-destructiveness has become a top national priority. To date, most of the resources committed to the prevention and control of youth violence, at both the national and local levels, has been invested in untested programs based on questionable assumptions and delivered with little consistency or quality control. Further, the vast majority of these programs are not being evaluated. This means we will never know which (if any) of them have had some significant deterrent effect; we will learn nothing from our investment in these programs to improve our understanding of the causes of violence or to guide our future efforts to deter violence; and there will be no real accountability for the expenditures of scarce community resources. Worse yet, some of the most popular programs have actually been demonstrated in careful scientific studies to be *ineffective,* and yet we continue to invest huge sums of money in them for largely political reasons.

What accounts for this limited investment in the evaluation of our prevention programs? First, there is little political or even program support for evaluation. Federal and state violence prevention initiatives rarely allocate additional evaluation dollars for the programs they fund. Given that the investment in such programs is relatively low, it is argued that every dollar available should go to the delivery of program services, i.e., to helping youth avoid involvement in violent or criminal behavior. Further, the cost of conducting a careful outcome evaluation is prohibitive for most individual programs, exceeding their entire annual budget in many cases. Finally, many program developers believe they know *intuitively* that their programs work, and thus they do not think a rigorous evaluation is required to demonstrate this.

Unfortunately, this view and policy is very shortsighted. When rigorous evaluations have been conducted, they often reveal that such programs are ineffective and can even make matters worse.[2] Indeed, many programs fail to even address the underlying causes of violence, involve simplistic "silver bullet" assumptions (e.g., I once had a counselor tell me there wasn't a single delinquent youth he couldn't "turn around" with an hour of individual counseling), and allocate investments of time and resources that are far too small to counter the years of exposure to negative influences of the family, neighborhood, peer group, and the media. Violent behavior is a complex behavior pattern which involves both individual dispositions and social contexts in which violence is normative and rewarded. Most violence prevention programs focus only on the individual dispositions and fail to address the reinforcements for violence in the social contexts where youth live, with the result that positive changes in the individual's behavior achieved in the treatment setting are quickly lost when the youth returns home to his or her family, neighborhood, and old friends.

Progress in our ability to effectively prevent and control violence requires evaluation. A responsible accounting to the taxpayers, private foundations, or businesses funding these programs requires that we justify these expenditures with tangible results. No respectable business or corporation would invest millions of dollars in an enterprise without checking to see if it is profitable. No reputable

physician would subject a patient to a medical treatment for which there was no evidence of its effectiveness (i.e., no clinical trials to establish its potential positive and negative effects). Our failure to provide this type of evidence has seriously undermined the public confidence in crime prevention efforts generally, and is at least partly responsible for the current public support for building more prisons and incapacitating youth—the public knows they are receiving some protection for this expenditure, even if it is temporary.

The prospects for effective prevention programs and a national prevention initiative have improved greatly during the past decade. We now have a substantial body of research on the causes and correlates of crime and violence. There is general consensus within the research community about the specific individual dispositions, contextual (family, school, neighborhood, and peer group) conditions, and interaction dynamics which lead into and out of involvement in violent behavior. These characteristics, which have been linked to the onset, continuity, and termination of violence, are commonly referred to as "risk" and "protective" factors for violence. Risk factors are those personal attributes and contextual conditions which increase the likelihood of violence. Protective factors are those which reduce the likelihood of violence, either directly or by virtue of buffering the individual from the negative effects of risk factors.[3] Programs which can alter these conditions, reducing or eliminating risk factors and facilitating protective factors, offer the most promise as violence prevention programs.

While our evaluation of these programs is still quite limited, we have succeeded in demonstrating that some of these programs are effective in deterring crime and violence. This breakthrough in prevention programming has yet to be reflected in national or state funding decisions, and is admittedly but a beginning point for developing the comprehensive set of prevention programs necessary for developing a national prevention initiative. But we are no longer in the position of having to say that "nothing works."

Ten proven programs are described in this series of ***Blueprints for Violence Prevention***. These Blueprints (which will be described later in this Editor's Introduction) are designed to be practical documents which will allow interested persons, agencies, and communities to make an informed judgment about a proven program's appropriateness for their local situation, needs, and available resources. If adopted and implemented well, a community can be reasonably assured that these programs will reduce the risks of violence and crime for their children.

## Background

The violence epidemic of the 1990s produced a dramatic shift in the public's perception of the seriousness of violence. In 1982, only three percent of adults identified crime and violence as the most important problem facing this country; by August of 1994, more than half thought crime and violence was the nation's most important problem. Throughout the '90s violence has been indicated as a more serious problem than the high cost of living, unemployment, poverty and homelessness, and health care. Again, in 1994, violence (together with a lack of discipline) was identified as the "biggest problem" facing the nation's public schools.[4] Among America's high school seniors, violence is the problem these young people worry about most frequently—more than drug abuse, economic problems, poverty, race relations, or nuclear war.[5]

The critical question is, *"How will we as a society deal with this violence problem?"* Government policies at all levels reflect a punitive, legalistic approach, an approach which does have broad

public support. At both the national and state levels, there have been four major policy and program initiatives introduced as violence prevention or control strategies in the 1990s: (1) the use of judicial waivers, transferring violent juvenile offenders as young as age ten into the adult justice system for trial, sentencing, and adult prison terms; (2) legislating new gun control policies (e.g., the Brady Handgun Violence Prevention Act, 1993); (3) the creation of "boot camps" or shock incarceration programs for young offenders, in order to instill discipline and respect for authority; and (4) community policing initiatives to create police-community partnerships aimed at more efficient community problem solving in dealing with crime, violence, and drug abuse.

Two of these initiatives are purely reactive: they involve ways of responding to violent acts after they occur; two are more preventive in nature, attempting to prevent the initial occurrence of violent behavior. The primary justification for judicial waivers and boot camps is a "just desserts" philosophy, wherein youthful offenders need to be punished more severely for serious violent offenses. But there is no research evidence to suggest either strategy has any increased deterrent effect over processing these juveniles in the juvenile justice system or in traditional correctional settings. In fact, although the evidence is limited, it suggests the use of waivers and adult prisons results in longer processing time and longer pretrial detention, racial bias in the decision about which youth to transfer into the adult system, a lower probability of treatment or remediation while in custody, and an increased risk of repeated offending when released.[6] The research evidence on the effectiveness of community policing and gun control legislation is very limited and inconclusive. We have yet to determine if these strategies are effective in preventing violent behavior.

There are some genuine prevention efforts sponsored by federal and state governments, by private foundations, and by private businesses. At the federal level, the major initiative involves the Safe and Drug-Free Schools and Communities Act (1994). This act provided $630 million in federal grants during 1995 to the states to implement violence (and drug) prevention programs in and around schools. State Departments of Education and local school districts are currently developing guidelines and searching for violence prevention programs demonstrated to be effective. But there is no readily available compendium of effective programs described in sufficient detail to allow for an informed judgment about their relevance and cost for a specific local application. Under pressure to do something, schools have implemented whatever programs were readily available. As a result, most of the violence prevention programs currently being employed in the schools, e.g., conflict resolution, peer mediation, individual counseling, metal detectors, and locker searches and sweeps have either not been evaluated or the evaluations have failed to establish any significant, sustained deterrent effects.[7]

Nationally, we are investing far more resources in building and maintaining prisons than in primary prevention programs.[8] We have put more emphasis on reacting to violent offenders after the fact and investing in prisons to remove these young people from our communities, than on preventing our children from becoming violent offenders in the first place and retaining them in our communities as responsible, productive citizens. Of course, if we have no effective prevention strategies or programs, there is no choice.

This is the central issue facing the nation in 1998: *Can we prevent the onset of serious violent behavior?* If we cannot, then we have no choice but to build, fill, and maintain more prisons. Yet if we know how to prevent the onset of violence, can we mount an efficient and effective prevention

initiative? There is, in fact, considerable public support for violence prevention programming for our children and adolescents.[9] *How can we develop, promote, and sustain a violence prevention initiative in this country?*

## Violence Prevention Programs—What Works?

Fortunately, we are past the "nothing has been demonstrated to work" era of program evaluation.[10] During the past five years more than a dozen scholarly reviews of delinquency, drug, and violence prevention programs have been published, all of which claim to identify programs that have been successful in deterring crime and violence.[11]

However, a careful review of these reports suggests some caution and a danger of *overstating* this claim. First, very few of these recommended programs involve reductions in violent behavior as the outcome criteria. For the most part, reductions in delinquent behavior or drug use *in general* or arrests/revocations for *any offense* have been used as the outcome criteria. This is probably not a serious threat to the claim that we have identified effective violence prevention programs, as research has established that delinquent acts, violence, and substance use are interrelated, and involvement in any one is associated with involvement in the others. Further, they have a common set of causes, and serious forms of violence typically occur later in the developmental progression, suggesting that a program that is effective in reducing earlier forms of delinquency or drug use should be effective in deterring serious violent offending.[12] Still, some caution is required, given that very few studies have actually demonstrated a deterrent or marginal deterrent effect for serious violent behavior.

Second, the methodological standards vary greatly across these reviews. A few actually score each program evaluation reviewed on its methodological rigor,[13] but for most the standards are variable and seldom made explicit. If the judgment on effectiveness were restricted to individual program evaluations employing true experimental designs and demonstrating statistically significant deterrent (or marginal deterrent) effects, the number of recommended programs would be cut by two-thirds or more. An experimental (or good quasi-experimental) design and statistically significant results should be minimum criteria for recommending program effectiveness. Further, very few of the programs recommended have been replicated at multiple sites or demonstrated that their deterrent effect has been sustained for some period of time *after* leaving the program, two additional criteria that are important. In a word, the standard for the claims of program effectiveness in these reviews is very *low*. Building a national violence prevention initiative on this collective set of recommended programs would be risky.

## Blueprints for Violence Prevention

In 1996, the Center for the Study and Prevention of Violence at the University of Colorado at Boulder, working with William Woodward, Director of the Colorado Division of Criminal Justice (CDCJ), who played the primary role in securing funding from the Colorado Division of Criminal Justice, the Centers for Disease Control and Prevention, and the Pennsylvania Commission on Crime and Delinquency, initiated a project to identify ten violence prevention programs that met a very high scientific standard of program effectiveness—*programs that could provide an initial nucleus for a national violence prevention initiative.* Our objective was to identify truly outstanding programs, and to describe these interventions in a series of "Blueprints." Each Blueprint describes the

theoretical rationale for the intervention, the core components of the program as implemented, the evaluation designs and findings, and the practical experiences the program staff encountered while implementing the program at multiple sites. The Blueprints are designed to be very practical descriptions of effective programs which allow states, communities, and individual agencies to: (1) determine the appropriateness of each intervention for their state, community, or agency; (2) provide a realistic cost estimate for each intervention; (3) provide an assessment of the organizational capacity required to ensure its successful start-up and operation over time; and (4) give some indication of the potential barriers and obstacles that might be encountered when attempting to implement each type of intervention. In 1997, additional funding was obtained from the Division of Criminal Justice, allowing for the development of the ten Blueprint programs.

## Blueprint Program Selection Criteria

In consultation with a distinguished Advisory Board,[14] we established the following set of evaluation standards for the selection of Blueprint programs: (1) an experimental design, (2) evidence of a statistically significant deterrent (or marginal deterrent) effect, (3) replication at multiple sites with demonstrated effects, and (4) evidence that the deterrent effect was sustained for at least one year post-treatment. This set of selection criteria establishes a very high standard, one that proved difficult to meet. But it reflects the level of confidence necessary if we are going to recommend that communities replicate these programs with reasonable assurances that they will prevent violence. Given the high standards set for program selection, the burden for communities mounting an expensive outcome evaluation to demonstrate their effectiveness is removed; this claim can be made as long as the program is implemented well. Documenting that a program is implemented well is relatively inexpensive, but critical to the claim that a program is effective.

Each of the four evaluation standards is described in more detail as follows:

### 1. Strong Research Design

Experimental designs with random assignment provide the greatest level of confidence in evaluation findings, and this is the type of design required to fully meet this Blueprint standard. Two other design elements are also considered essential for the judgment that the evaluation employed a strong research design: low rates of participant attrition and adequate measurement. Attrition may be indicative of problems in program implementation; it can compromise the integrity of the randomization process and the claim of experimental-control group equivalence. Measurement issues include the reliability and validity of study measures, including the outcome measure, and the quality, consistency, and timing of their administration to program participants.

### 2. Evidence of Significant Deterrence Effects

This is an obvious minimal criterion for claiming program effectiveness. As noted, relatively few programs have demonstrated effectiveness in reducing the onset, prevalence, or individual offending rates of *violent behavior*. We have accepted evidence of deterrent effects for delinquency (including childhood aggression and conduct disorder), drug use, and/or violence as evidence of program effectiveness. We also accepted program evaluations using arrests as the outcome measure. Evidence for a deterrent effect on violent behavior is certainly preferable, and programs demonstrating this effect were given preference in selection, all other criteria being equal.

Both primary and secondary prevention effects, i.e., reductions in the *onset* of violence, delinquency, or drug use compared to control groups and pre-post reductions in these *offending rates,* could meet this criterion. Demonstrated changes in the targeted risk and protective factors, in the absence of any evidence of changes in delinquency, drug use, or violence, was not considered adequate to meet this criterion.

### 3. Multiple Site Replication

Replication is an important element in establishing program effectiveness. It establishes the robustness of the program and its prevention effects; its exportability to new sites. This criterion is particularly relevant for selecting Blueprint programs for a national prevention initiative where it is no longer possible for a single program designer to maintain personal control over the implementation of his or her program. Adequate procedures for monitoring the quality of implementation must be in place, and this can be established only through actual experience with replications.

### 4. Sustained Effects

Many programs have demonstrated initial success in deterring delinquency, drug use, and violence during the course of treatment or over the period during which the intervention was being delivered and reinforcements controlled. This selection criterion requires that these short-term effects be sustained beyond treatment or participation in the designed intervention. For example, if a preschool program designed to offset the negative effects of poverty on school performance (which in turn effects school bonding, present and future opportunities, and later peer group choice/selection, which in turn predicts delinquency) demonstrates its effectiveness when children start school, but these effects are quickly lost during the first two to three years of school, there is little reason to expect this program will prevent the onset of violence during the junior or senior high school years when the risk of onset is at its peak. Unfortunately, there is clear evidence that the deterrent effects of most prevention programs deteriorate quickly once youth leave the program and return to their original neighborhoods, families, and peer groups or gangs.

### Other Criteria

In the selection of model programs, we considered several additional factors. We looked for evidence that change in the targeted risk or protective factor(s) mediated the change in violent behavior. This evidence clearly strengthens the claim that participation in the program was responsible for the change in violent behavior, and it contributes to our theoretical understanding of the causal processes involved. We were surprised to discover that many programs reporting significant deterrent effects (main effects) had not collected the necessary data to do this analysis or, if they had the necessary data, had not reported on this analysis.

We also looked for cost data for each program as this is a critical element in any decision to replicate one of these Blueprint programs, and we wanted to include this information in each Blueprint. Evaluation reports, particularly those found in the professional journals, rarely report program costs. Even when asked to provide this information, many programs are unable (or unwilling) to provide the data. In many cases program costs are difficult to separate from research and evaluation costs. Further, when these data are available, they typically involve conditions or circumstances unique to a particular site and are difficult to generalize. There are no standardized cost criteria, and it is very

difficult to compare costs across programs. It is even more difficult to obtain reliable cost-benefit estimates. A few programs did report both program costs and cost-benefit estimates. There have been two recent cost-benefit studies involving Blueprint programs which suggest that these programs are cost-effective, but this information is simply not available for most programs.[15]

Finally, we considered each program's willingness to work with the Center in developing a Blueprint for national dissemination and the program's organizational capacity to provide technical assistance and monitoring of program implementation on the scale that would be required if the program was selected as a Blueprint program and became part of a national violence prevention initiative.

Programs must be willing to work with the Center in the development of the Blueprint. This involves a rigorous review of program evaluations with questions about details not covered in the available publications; the preparation of a draft Blueprint document following a standardized outline; attending a conference with program staff, staff from replication sites, and Center staff to review the draft document; and making revisions to the document as requested by Center staff. Each Blueprint is further reviewed at a second conference in which potential users—community development groups, prevention program staffs, agency heads, legislators, and private foundations—"field test" the document. They read each Blueprint document carefully and report on any difficulties in understanding what the program requires, and on what additional information they would like to have if they were making a decision to replicate the program. Based on this second conference, final revisions are made to the Blueprint document and it is sent back to the Program designer for final approval.

In addition, the Center will be offering technical assistance to sites interested in replicating a Blueprint program and will be monitoring the quality of program implementation at these sites (see the "Technical Assistance and Monitoring of Blueprint Replications" section below). This requires that each selected program work with the Center in screening potential replication sites, certifying persons qualified to deliver technical assistance for their program, delivering high quality technical assistance, and cooperating with the Center's monitoring and evaluation of the technical assistance delivered and the quality of implementation achieved at each replication site. Some programs are already organized and equipped to do this, with formal written guidelines for implementation, training manuals, instruments for monitoring implementation quality, and a staff trained to provide technical assistance; others have few or none of these resources or capabilities. Participation in the Blueprint project clearly involves a substantial demand on the programs. All ten programs selected have agreed to participate as a Blueprint program.

## Blueprint Programs: An Overview

We began our search for Blueprint programs by examining the set of programs recommended in scholarly reviews. We have since expanded our search to a much broader set of programs and continue to look for programs that meet the selection standards set forth previously. To date, we have reviewed more than 450 delinquency, drug, and violence prevention programs. As noted, ten programs have been selected thus far, based upon a review and recommendation of the Advisory Board. These programs are identified in Table A.

The standard we have set for program selection is very high. Not all of the ten programs selected meet all of the four individual standards, but as a group they come the closest to meeting these standards that we could find. As indicated in Table A, with one exception they have all demonstrated

## Table A. Blueprint Programs

| PROJECT | TARGET POPULATION | EVID. OF EFFECT* | MULTI-SITE | COST/ BENEFIT | SUSTAINED EFFECT | GENERA-LIZABLE | TYPE OF PROGRAM |
|---|---|---|---|---|---|---|---|
| Nurse Home Visitation (Dr. David Olds) | Pregnant women at risk of preterm delivery and low birthweight | X | X | X | through age 15 | X | Prenatal and postpartum nurse home visitation |
| Bullying Prevention Program (Dr. Dan Olweus) | Primary and secondary school children (universal intervention) | X | England, Canada; South Carolina | | 2 years post-treatment | Generality to U.S. unk.; initial S.C. results positive | School-based program to reduce victim/bully problems |
| Promoting Alternative Thinking Strategies (Dr. M. Greenberg and Dr. C. Kusche) | Primary school children (universal intervention) | X | X | | 2 years post-treatment | X | School-based program to promote emotional competence |
| Big Brothers Big Sisters of America (Ms. Dagmar McGill) | Youth 6 to 18 years of age from single-parent homes | X | Multisite single design, 8 sites | | | X | Mentoring program |
| Quantum Opportunities (Mr. Ben Lattimore) | At-risk, disadvantaged, high school youth | X | Multisite single design, 5 sites; replic. by D.O.L. | X | through age 20 | | Educational incentives |
| Multisystemic Therapy (Dr. Scott Henggeler) | Serious, violent, or substance abusing juvenile offenders and their families | X | X | X | 4 years post-treatment | X | Family ecological systems approach |
| Functional Family Therapy (Dr. Jim Alexander) | Youth at risk for institutionalization | X | X | X | 30 months posttreatment | X | Behavioral systems family therapy |
| Midwestern Prevention Project (Dr. Mary Ann Pentz) | Middle/junior school (6th/7th grade) | X | X | | Through high school | X | Drug use prevention (social resistance skills); with parent, media, and community components |
| Life Skills Training (Dr. Gilbert Botvin) | Middle/junior school (6th/7th grade) | X | X | | Through high school | X | Drug use prevention (social skills and general life skills training) |
| Multidimensional Treatment Foster Care (Dr. Paricia Chamberlain) | Serious and chronic delinquents | X | X | X | 1 year post-treatment | | Foster care with treatment |

significant deterrent effects with experimental designs using random assignment to experimental and control groups (the Bullying Prevention Program involved a quasi-experimental design). All involve multiple sites and thus have information on replications and implementation quality, but not all replication sites have been evaluated as independent sites (e.g., the Big Brothers Big Sisters mentoring program was implemented at eight sites, but the evaluation was a single evaluation involving all eight sites in a single aggregated analysis). Again, with one exception (Big Brothers Big Sisters), all the selected programs have demonstrated sustained effects for at least one year post-treatment.

The first two Blueprints were published and disseminated in the fall of 1997: the Big Brothers Big Sisters Program and the Midwestern Prevention Project. The other eight Blueprints will be published during 1998—four in the spring, two in the summer, and the final two in the fall.

## Technical Assistance and Monitoring of Blueprint Replications[16]

The Blueprint project includes plans for a technical assistance and monitoring component to assist interested communities, agencies, and organizations in their efforts to implement one or more of the Blueprint programs. *Communities should not attempt to replicate a Blueprint program without technical assistance from the program designers.* If funded, technical assistance for replication and program monitoring will be available through the Center for the Study and Prevention of Violence at a very modest cost. Technical assistance can also be obtained directly from the Blueprint programs with costs for consulting fees, travel, and manuals negotiated directly with each program.

There are three common problems encountered by communities when attempting to develop and implement violence prevention interventions. First, there is a need to identify the specific risk and protective factors to be addressed by the intervention and the most appropriate points of intervention to address these conditions. In some instances, communities have already completed a risk assessment and know their communities' major risk factors and in which context to best initiate an intervention. In other cases this has not been done and the community may require some assistance in completing this task. We anticipate working with communities and agencies to help them evaluate their needs and resources in order to select an appropriate Blueprint program to implement. This may involve some initial on-site work assisting the community in completing some type of risk assessment as a preparatory step to selecting a specific Blueprint program for implementation.

Second, assuming the community has identified the risk and protective factors they want to address, a critical problem is in locating prevention interventions which are *appropriate* to address these risk factors and making an informed decision about which one(s) to implement. Communities often become lost in the maze of programs claiming they are effective in changing identified risk factors and deterring violence. More often, they are faced with particular interest groups pushing their own programs or an individual on their advisory board recommending a pet project, with no factual information or evidence available to provide some rational comparison of available options. Communities often need assistance in making an informed selection of programs to implement.

Third, there are increasingly strong pressures from funders, whether the U.S. Congress, state legislatures, federal or state agencies, or private foundations and businesses, for accountability. The current trend is toward requiring *all* programs to be monitored and evaluated. This places a tremendous burden on most programs which do not have the financial resources or expertise to conduct a

meaningful evaluation. A rigorous outcome evaluation typically would cost more than the annual operating budget of most prevention programs; the cumulative evaluations of our Blueprint programs, for example, average more than a million dollars each. The selection of a Blueprint program eliminates the need for an outcome evaluation, at least for an initial four or five years.[17] Because these programs have already been rigorously evaluated, the critical issue for a Blueprint program is the *quality of the implementation*; if the program is implemented well, we can assume it is effective. To ensure a quality implementation, technical assistance and monitoring of the implementation (a process evaluation) are essential.

## Limitations

Blueprint programs are presented as complete programs as it is the *program* that has been evaluated and demonstrated to work. Ideally, we would like to be able to present specific intervention components, e.g., academic tutoring, mentoring of at-risk youth, conflict resolution training, work experience, parent effectiveness training, etc., as proven intervention strategies based upon evaluations of many different programs using these components. We do not yet have the research evidence to support a claim that specific components are effective for specific populations under some specific set of conditions. Most of the Blueprint programs (and prevention programs generally) involve multiple components, and their evaluations do not establish the independent effects of each separate component, but only the combination of components as a single "package." It is the "package" which has been demonstrated to work for specific populations under given conditions. The claim that one is using an intervention that has been demonstrated to work applies only if the entire Blueprint program, as designed, implemented, and evaluated, is being replicated; this claim is not warranted if only some specific subcomponent is being implemented or if a similar intervention strategy is being used, but with different staff training, or different populations of at-risk youth, or some different combination of components. It is for this reason that we recommend that communities desiring to replicate one of the Blueprint programs contact this program or the Center for the Study and Prevention of Violence for technical assistance.

Our knowledge about these programs and the specific conditions under which they are effective will certainly change over time. Already there are extensions and modifications to these programs which are being implemented and carefully evaluated. Over the next three to five years it may be necessary to revise our Blueprint of a selected program. Those modifications currently underway typically involve new at-risk populations, changes in the delivery systems, changes in staff selection criteria and training, and in the quantity or intensity of the intervention delivered. Many of these changes are designed to reduce costs and increase the inclusiveness and generality of the program. It is possible that additional evaluations may undermine the claim that a particular Blueprint program is effective, however it is far more likely they will improve our understanding of the range of conditions and circumstances under which these programs are effective. In any event, we will continue to monitor the evaluations of these programs and make necessary revisions to their Blueprints. Most of these evaluations are funded at the federal level and they will provide ongoing evidence of the effectiveness of Blueprint programs, supporting (or not) the continued use of these programs without the need for local outcome evaluations.

The cost-benefit data presented in the Blueprints are those estimated by the respective programs. We have not undertaken an independent validation of these estimates and are not certifying their

accuracy. Because they involve different comparison groups, different cost assumptions, and considerable local variation in costs for specific services, it is difficult to compare this aspect of one Blueprint program with another. Potential users should evaluate these claims carefully. We believe these cost-benefit estimates are useful, but they are not the most important consideration in selecting a violence prevention program or intervention.

It is important to note that the *size* of the deterrent effects of these Blueprint programs is modest. There are no "silver bullets," no programs that prevent the onset of violence for all youth participating in the intervention. Good prevention programs reduce the rates of violence by 30-40 percent.[18] We have included a section in each Blueprint presenting the evaluation results so that potential users can have some idea of how strong the program effect is likely to be and can prepare their communities for a realistic set of expectations. It is important that we not oversell violence prevention programs; it is also the case that programs with a 30 percent reduction in violence can have a fairly dramatic effect if sustained over a long period of time.

Finally, we are not recommending that communities invest all of their available resources in Blueprint programs. We need to develop and evaluate new programs to expand our knowledge of what works and to build an extensive repertoire of programs that work if we are ever to mount a comprehensive prevention initiative in this country. At the same time, given the costs of evaluating programs, it makes sense for communities to build their portfolio of programs around interventions that have been demonstrated to work, and to limit their investment in new programs to those they can evaluate carefully. Our Blueprint series is designed to help communities adopt this strategy.

## Summary

As we approach the 21st Century, the nation is at a critical crossroad: Will we continue to react to youth violence after the fact, becoming increasingly punitive and locking more and more of our children in adult prisons? Or will we bring a more healthy balance to our justice system by designing and implementing an effective violence prevention initiative as a part of our overall approach to the violence problem? We do have a choice.

To mount an effective national violence prevention initiative in this country, we need to find and/or create effective violence prevention programs and implement them with integrity so that significant reductions in violent offending can be realized. We have identified a core set of programs that meet very high scientific standards for being effective prevention programs. These programs could constitute a core set of programs in a national violence prevention initiative. What remains is to ensure that communities know about these programs and, should they desire to replicate them, have assistance in implementing them as designed. That is our objective in presenting this series of *Blueprints for Violence Prevention.* They constitute a complete package of both programs and technical assistance made available to states, communities, schools, and local agencies attempting to address the problems of violence, crime, and substance abuse in their communities.

**Delbert S. Elliot**
*Series Editor*

## ENDNOTES

1. Cook and Laub, 1997; Fox, 1996; and Snyder and Sickmund, 1995 for an analysis of trends in juvenile arrests for violent crimes.

2. Lipsey, 1992, 1997; Sherman et al., 1997; and Tolan and Guerra, 1994.

3. The technical definition of a protective factor is an attribute or condition that buffers one from the expected effect of one or more risk factors, but many use the term more generally to refer to anything that reduces the likelihood of violence, whether that effect is direct or indirect.

4. Maguire and Pastore, 1996.

5. Johnston et al., 1996.

6. Fagan, 1996; Frazier, Bishop and Lanza-Kaduce, 1997; Lipsey, 1997; MacKenzie et al., 1992; Podkopaz and Feld, 1996; and Shaw and McKenzie, 1992.

7. Gottfredson, 1997; Lipsey, 1992; Sherman et al., 1997; Tolan and Guerra, 1994; and Webster, 1993.

8. Gottfredson, 1997.

9. Gallop, 1994.

10. Lipton, Martinson, and Wilks, 1975; Martinson, 1974; Sechrest et al., 1979; and Wright and Dixon, 1977.

11. Davis and Tolan, 1993; Dusenbury and Falco, 1995; Farrington, 1994; Greenwood et al., 1996; Hawkins, Catalano and Miller, 1992; Howell, 1995; Howell et al., 1995; Krisberg and Onek, 1994; Lipsey and Wilson, 1997; Loeber and Farrington, 1997; McGuire, 1995; National Research Council, 1993; Office of Juvenile Justice and Delinquency Prevention, 1995; Powell and Hawkins, 1996; Sherman et al., 1997; and Tolan and Guerra, 1994.

12. Elliott, 1993, 1994; Jessor and Jessor, 1977; Kandel et al., 1986; Osgood et al., 1988; and White et al., 1985.

13. Gottfredson, 1997; Lipsey, 1992; Osgood et al., 1988; and Sherman et al., 1997.

14. Advisory Board members included: Denise Gottfredson, University of Maryland; Mark Lipsey, Vanderbilt University; Hope Hill, Howard University; Peter Greenwood, the Rand Corporation; and Patrick Tolan, University of Illinois.

15. Greenwood, Model, Rydell, and Chiesa, 1996; Washington State Institute for Public Policy, 1998.

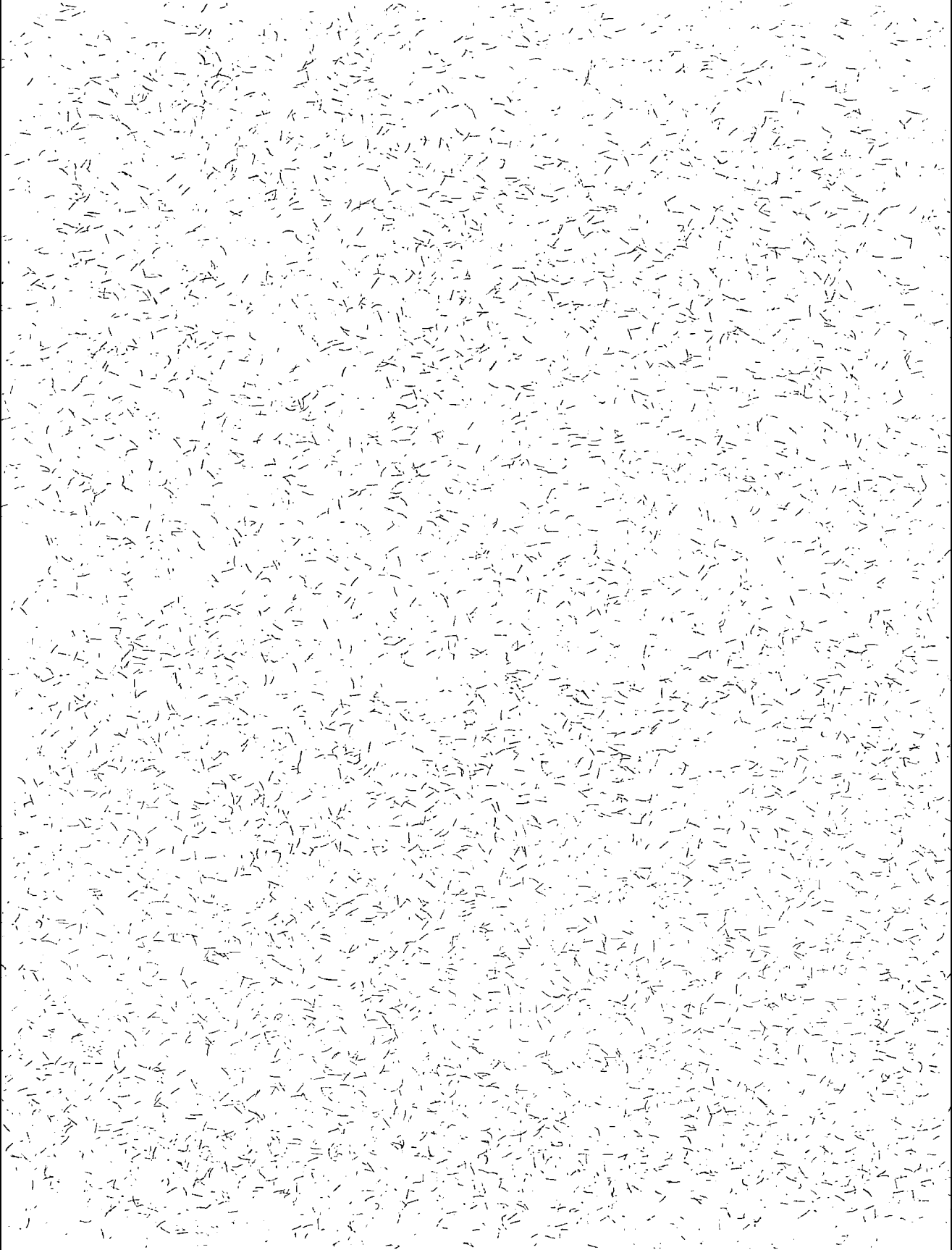
16. The Center has submitted a proposal to the Office of Juvenile Justice and Delinquency Prevention that would provide technical assistance and evaluation of program implementation for 50 replications of Blueprint programs.

17. At some point it will be necessary to reassess each Blueprint program to ensure that it continues to demonstrate deterrent effects and to test its generalizability to other populations and community conditions. In many cases, this will be done at the national level with federal support for large scale evaluations. For example, the U.S. Department of Labor and the Ford Foundation are currently funding seven Quantum Opportunity Programs with outcome evaluations; and the Office of Juvenile Justice and Delinquency Prevention is funding several Big Brothers Big Sisters Programs with evaluations. Local agencies replicating these Blueprint programs may never have to conduct rigorous outcome evaluations, but some continuing outcome evaluations at some level (national or local) is essential.

18. See Lipsey, 1992, 1997, for a review of issues and problems in estimating effect sizes and the range of effect sizes observed for delinquency prevention programs.

# Blueprints


## Model Program Descriptions



# MODEL PROGRAM DESCRIPTIONS

### Prenatal and Infancy Home Visitation by Nurses

Nurse home visitation is a program that sends nurses to the homes of pregnant women who are predisposed to infant health and developmental problems (i.e., at risk of preterm delivery and low-birth weight children). The goal of the program is to improve parent and child outcomes. Home visiting promotes the physical, cognitive, and social-emotional development of the children, and provides general support as well as instructive parenting skills to the parents. Treatment begins during pregnancy, with an average of eight visits for about 1 hour and 15 minutes, and continues to 24 months postpartum with visits diminishing in frequency to approximately every six weeks. Screenings and transportation to local clinics and offices are also offered as a part of treatment. Nurse home visiting has had some positive outcomes on obstetrical health, psychosocial functioning, and other health-related behaviors (especially reductions in smoking). Child abuse and neglect was lower and the developmental quotients of children at 12 and 24 months were higher in the treatment group than in the control group for poor, unmarried teens. Follow-up at 15-years postpartum showed significant enduring effects on child abuse and neglect, completed family size, welfare dependence, behavior problems due to substance abuse, and criminal behavior on the part of low income, unmarried mothers. Positive program effects through the child's second birthday have been replicated in a major urban area.

### Bullying Prevention Program

The anti-bullying program has as its major goal the reduction of victim/bully problems among primary and secondary school children. It aims to increase awareness of the problem and knowledge about it, to achieve active involvement on the part of teachers and parents, to develop clear rules against bullying behavior, and to provide support and protection for the victims of bullying. Intervention occurs at the school level, class level, and individual level. In Bergen, Norway, the frequency of bully/victim problems decreased by 50 percent or more in the two years following the campaign. These results applied to both boys and girls and to students across all grades studied. In addition, school climate improved, and antisocial behavior in general such as theft, vandalism, and truancy showed a drop during these years.

### Promoting Alternative Thinking Strategies

Promoting Alternative Thinking Strategies (PATHS) is a school-based intervention designed to promote emotional competence, including the expression, understanding, and regulation of emotions. The PATHS program is a universal intervention, implemented by teachers (after a three-day training workshop) with entire classrooms of children from kindergarten through fifth grades. The curriculum includes a feelings unit (with a self-control and initial problem-solving skills program within that unit) and an interpersonal cognitive problem solving unit. The generalization of those learned skills to children's everyday lives is a component of each major unit. An additional unit on self-control and readiness is provided for special needs classrooms. Studies have compared classrooms receiving the intervention to matched controls using populations of normally-adjusted students, behaviorally at-risk students, and deaf students. Program effects included teacher-, child sociometric-, and child self-report ratings of behavior change on such constructs as hyperactivity, peer aggression, and conduct problems.

### Big Brothers Big Sisters of America

Big Brothers Big Sisters of America (BBBSA) is the oldest and best known mentoring program in the United States. Local programs are autonomously funded affiliates of BBBSA, with the national office in Philadelphia. The more than 500 affiliates maintain over 100,000 one-to-one relationships between a volunteer adult and a youth. Matches are carefully made using established procedures and criteria. The program serves children 6 to 18 years of age, with the largest portion being those 10 to 14 years of age. A significant number of the children are from disadvantaged single-parent households. A mentor meets with his/her youth partner at least three times a month for three to five hours. The visits encourage the development of a caring relationship between the matched pair. An 18 month study of eight BBBS affiliates found that the youth in the mentoring program, compared to a control group who were on a waiting list for a match, were less likely to start using drugs and alcohol, less likely to hit someone, had improved school attendance, attitudes and performance, and had improved peer and family relationships.

### Quantum Opportunities

The Quantum Opportunities Program (QOP) provides education, development, and service activities, coupled with a sustained relationship with a peer group and a caring adult, over the four years of high school for small groups of disadvantaged teens. The goal of the program is to help high risk youth from poor families and neighborhoods to graduate from high school and attend college. The program includes (1) 250 hours per year of self-paced and competency-based basic skills, taught outside of regular school hours; (2) 250 hours per year of development opportunities, including cultural enrichment and personal development; and (3) 250 hours per year of service opportunities to their communities to help develop the prerequisite work skills. Financial incentives are offered to increase participation, completion, and long range planning. Results from the pilot test of this program indicated that QOP participants, compared to the control group, were less likely to be arrested during the juvenile years, were more likely to have graduated from high school, to be enrolled in higher education or training, planning to complete four years of college, and less likely to become a teen parent.

### Multisystemic Therapy

Multisystemic Therapy (MST) views individuals as being nested within a complex of interconnected systems that encompass individual, family, and extrafamilial (peer, school, neighborhood) factors. Behavior problems can be maintained by problematic transactions within or between any one or a combination of these systems. MST targets the specific factors in each youth's and family's ecology (family, peer, school, neighborhood, support network) that are contributing to antisocial behavior. MST interventions are pragmatic, goal oriented, and emphasize the development of family strengths. The overriding purpose of MST is to help parents to deal effectively with their youth's behavior problems, including disengagement from deviant peers and poor school performance. To accomplish the goal of family empowerment, MST also addresses identified barriers to effective parenting (e.g., parental drug abuse, parental mental health problems) and helps family members to build an indigenous social support network (e.g., with friends, extended family, neighborhoods, church members). To increase family collaboration and treatment generalization, MST is typically provided in the home, school, and other community locations by master's level counselors with low caseloads and 24 hours/day, seven days/week availability. The average duration of treatment is

about four months, which includes approximately 50 hours of face-to-face therapist-family contact. MST has been demonstrated as an effective treatment for decreasing the antisocial behavior of violent and chronic juvenile offenders at a cost savings—that is, reducing long-term rates of rearrest and out-of-home placement. Moreover, families receiving MST have shown extensive improvements in family functioning.

**Functional Family Therapy**

Functional Family Therapy (FFT) is a short term, easily trainable, well documented program which has been applied successfully to a wide range of problem youth and their families in various contexts (e.g., rural, urban, multicultural, international) and treatment systems (e.g., clinics, home-based programs, juvenile courts, independent providers, federally funded clinical trials). Success has been demonstrated and replicated for over 25 years with a wide range of interventionists, including paraprofessionals and trainees representing the various professional degrees (e.g., B.S.W., M.S.W., Ph.D., M.D., R.N., M.F.T.). The program involves specific phases and techniques designed to engage and motivate youth and families, and especially deal with the intense negative affect (hopelessness, anger) that prevents change. Additional phases and techniques then change youth and family communication, interaction, and problem solving, then help families better deal with and utilize outside system resources. Controlled comparison studies with follow-up periods of one, three, and even five years have demonstrated significant and long-term reductions in youth re-offending and sibling entry into high-risk behaviors. Comparative cost figures demonstrate very large reductions in daily program costs compared to other treatment programs.

**Midwestern Prevention Project**

The Midwestern Prevention Project is a comprehensive population-based drug abuse (cigarettes, alcohol, and marijuana) prevention program that has operated in two major Midwestern SMSAs, Kansas City and Indianapolis, where it has been known locally as Project STAR (Students Taught Awareness and Resistance) and I-STAR, respectively. The goal of the program is to decrease the rates of onset and prevalence of drug use in young adolescents (ages 10-15), and to decrease drug use among parents and other residents of the two communities. The program consists of five intervention strategies designed to combat the community influences on drug use: mass media, school, parent, community organization, and health policy change. The components focus on promoting drug use resistance and counteraction skills by adolescents (direct skills training), prevention practices and support of adolescent prevention practices by parents and other adults (indirect skills training), and dissemination and support of non-drug use social norms and expectations in the community (environmental support). This program has been effective at reducing alcohol, cigarette, and marijuana use among young adolescents, with some effects maintained up to age 23.

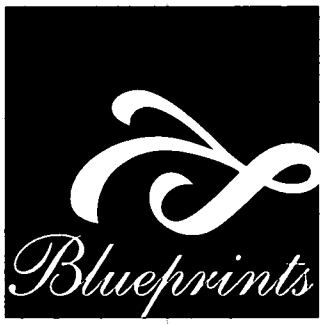
**Life Skills Training**

Life Skills Training is a drug use primary prevention program (cigarettes, alcohol, and marijuana), which provides general life skills training and social resistance skills training to junior high/middle (6th or 7th grade) school students. The curriculum includes 15 sessions taught in school by regular classroom teachers with booster sessions provided in year two (10 class sessions) and year three (five class sessions). The three basic components of the program include: (1) Personal Self-Management Skills (e.g., decision-making and problem-solving, self-control skills for coping with anxi-

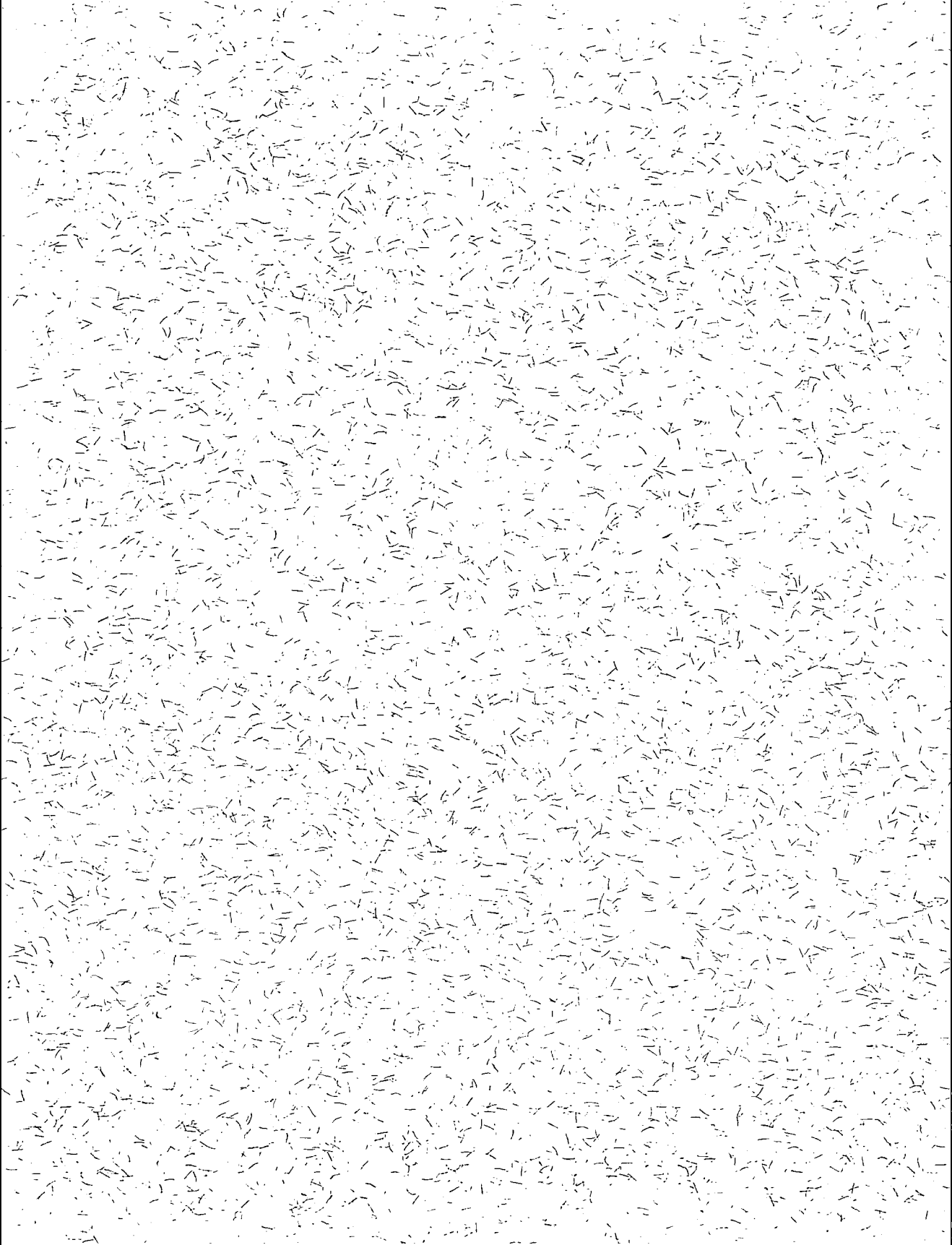
ety, and self-improvement skills); (2) Social Skills (e.g. communication and general social skills); and (3) Drug-Related Information and Skills designed to impact on knowledge and attitudes concerning drug use, normative expectations, and skills for resisting drug use influences from the media and peers. Life Skills Training has been effective at reducing alcohol, cigarette, and marijuana use among young adolescents. The effects for tobacco and heavy alcohol use have been sustained through the end of high school.

### Multidimensional Treatment Foster Care

Social learning-based Multidimensional Treatment Foster Care (MTFC) is a cost effective alternative to residential treatment for adolescents who have problems with chronic delinquency and antisocial behavior. Community families are recruited, trained, and closely supervised to provide MTFC placements, treatment, and supervision to participating adolescents. MTFC parent training emphasizes behavior management methods to provide youth with a structured and therapeutic living environment. After completing a preservice training, MTFC parents attend a weekly group meeting run by a program case manager where ongoing supervision is provided. Supervision and support is also given to MTFC parents during daily telephone calls to check on youths' progress. Family therapy is provided for the youths' biological (or adoptive) families. The parents are taught to use the structured system that is being used in the MTFC home. The effectiveness of the MTFC model has been evaluated, and MTFC youth had significantly fewer arrests during a 12-month follow-up than a control group of youth who participated in residential group care programs. The MTFC model has also been shown to be effective for children and adolescents leaving state mental hospital settings.




# Program Overview



# LIFE SKILLS TRAINING

## Program Overview

The results of over a dozen studies consistently show that the ***Life Skills Training*** (LST) program dramatically reduces tobacco, alcohol, and marijuana use. These studies further show that the program works with a diverse range of adolescents, produces results that are long-lasting, and is effective when taught by teachers, peer leaders, or health professionals.

**Program Targets:**

LST is a primary intervention that targets all middle/junior high school students (initial intervention in grades 6 or 7, depending on the school structure, with booster sessions in the two subsequent years).

**Program Content:**

LST is a three-year intervention designed to prevent or reduce gateway drug use (i.e., tobacco, alcohol, and marijuana), primarily implemented in school classrooms by school teachers. The program is delivered in 15 sessions in year one, 10 sessions in year 2, and 5 sessions in year three. Sessions, which last an average of 45 minutes, can be delivered once a week or as an intensive mini-course. The program consists of three major components which teach students (1) general self-management skills, (2) social skills, and (3) information and skills specifically related to drug use. Skills are taught using training techniques such as instruction, demonstration, feedback, reinforcement, and practice.

**Program Outcomes:**

Using outcomes averaged across more than a dozen studies conducted with LST, it has been found to:

- Cut tobacco, alcohol, and marijuana use 50% - 75%.

Long-term follow-up results observed six years following the intervention show that LST:

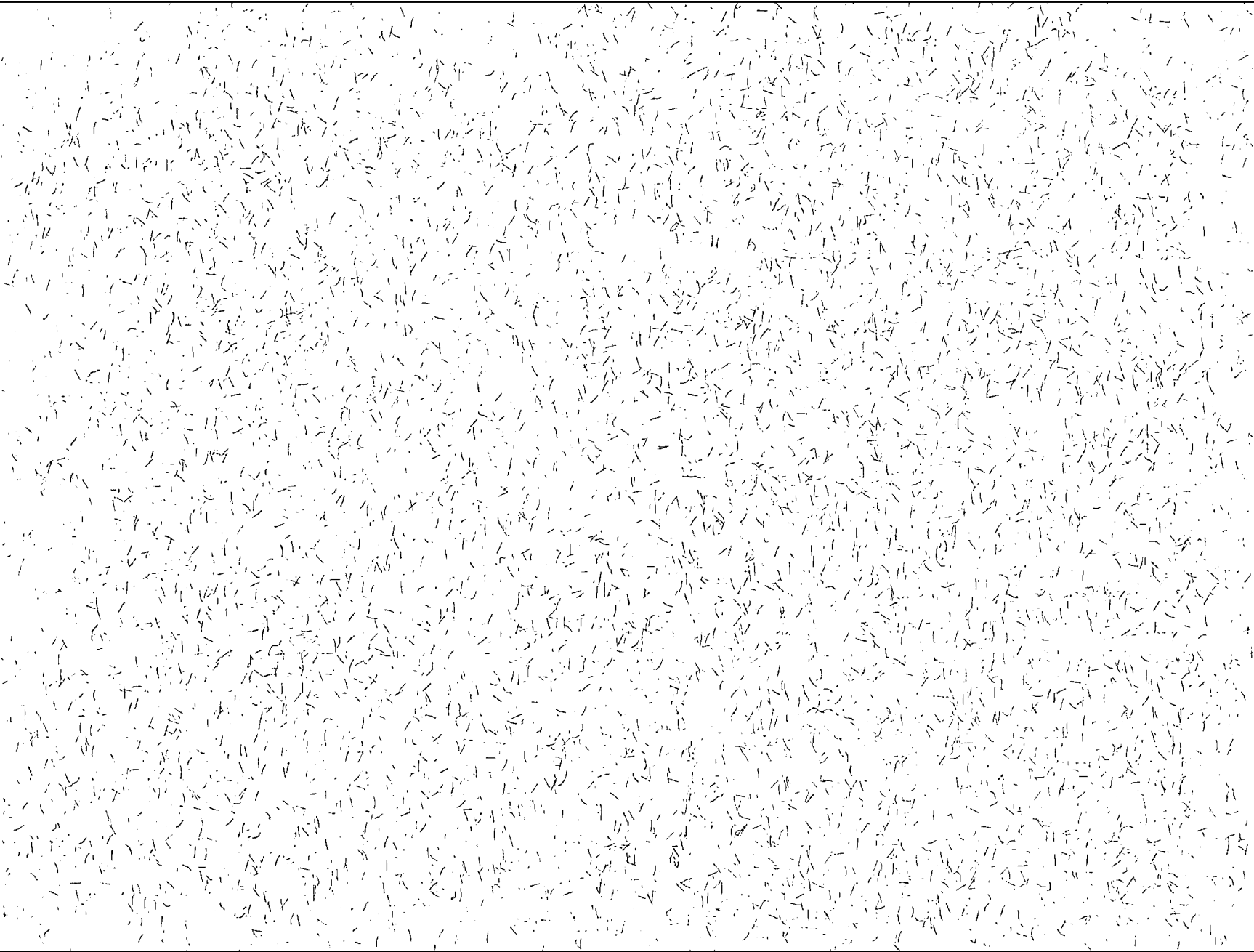
- Cuts polydrug use up to 66%,
- Reduces pack-a-day smoking by 25%, and
- Decreases use of inhalants, narcotics, and hallucinogens.

**Program Costs:**

LST can be implemented at a cost of approximately $7 per student per year (curriculum materials averaged over the three-year period). This does not include the cost of training which is a minimum of $2,000 per day for one or two days.


**CHAPTER ONE**

**Executive Summary**



# EXECUTIVE SUMMARY

## Background

The ***Life Skills Training*** (LST) program was developed to address the monumental problem of substance abuse in this country. The adverse health, social, and legal consequences of this problem have been well documented. Cigarette smoking is a risk-factor for heart disease, various cancers, and chronic obstructive lung disease and accounts for over 430,000 deaths per year. Alcohol is not only related to chronic diseases such as cirrhosis of the liver, but is also a major factor in auto fatalities and homicides. Beyond this, adolescent drug use predicts a number of other undesirable outcomes such as reducing traditional educational accomplishments and job stability, increasing the likelihood of marrying and having children at younger ages, and increasing the likelihood of engaging in criminal behavior.

Despite considerable public attention and the expenditure of well over a billion dollars in the past few years alone, little if any progress has been made toward reducing drug abuse. At present, drug use among American youth is a problem of enormous proportions and it is getting worse. Since 1991, according to national surveys, drug use has increased by more than 30 percent leading some experts to believe that we are on the verge of a new drug epidemic. Figure 1 illustrates this trend in annual prevalence (proportion of users) of illicit drug use for twelfth grade students since 1975. According to the most recent national survey data, the following proportions of high school students have used alcohol, cigarettes, and illicit drugs at least once (Johnston, O'Malley & Bachman, 1995):

| | Alcohol | Cigarettes | Illicit Drugs |
|---|---|---|---|
| 8th Graders | 56% | 46% | 26% |
| 10th Graders | 71% | 57% | 37% |
| 12th Graders | 80% | 62% | 46% |

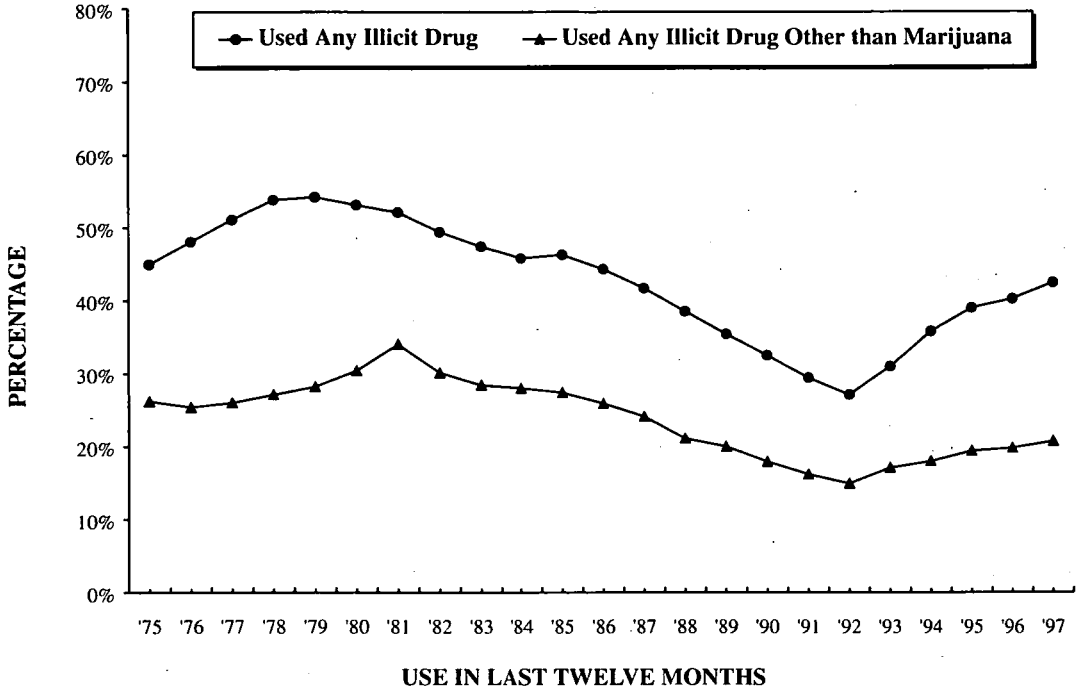
Results from the same survey indicated that during the past 30 days, the following proportions of high school students used the following substances one or more times:

| | Alcohol | Cigarettes | Illicit Drugs |
|---|---|---|---|
| 8th Graders | 26% | 19% | 11% |
| 10th Graders | 39% | 25% | 19% |
| 12th Graders | 50% | 31% | 22% |

For some of these teens, use may be discontinued after a brief period of experimentation. However, for many, initiation of cigarette smoking, drinking, or drug-taking may lead to patterns of use which result in both psychological and physical dependence. In general, programs designed to help individuals quit smoking, drinking, or using drugs have only been moderately effective. Quite simply, once any type of substance use habit is acquired it is extremely difficult to break. Scientific evidence now suggests that the development of effective prevention programs may offer the greatest potential for impacting this important health problem.

Unfortunately, reviews of the prevention research literature and meta-analytic studies show that many widely used drug abuse prevention approaches are ineffective. The most common approaches to substance abuse prevention over the past two decades have involved either the presentation of factual information concerning the dangers of substance use or what has been referred to as "affective" education.

**Figure 1. Trends in Annual Prevalence of an Illicit Drug Use Index for Twelfth Graders**




Approaches relying on the provision of factual information are based largely on the assumption that increased knowledge about psychoactive substances and their adverse consequences would be an effective deterrent. Affective education approaches are designed to enrich the personal and social development of students through class discussion and experimental classroom activities. Both of these approaches have proven to be largely ineffective because they do not address the factors promoting the initiation and early stages of substance use/abuse.

The LST program is a drug abuse prevention program that is based on an understanding of the causes of smoking, alcohol, and drug use/abuse. The LST intervention has been designed so that it targets the psychosocial factors associated with the onset of drug involvement. With this in mind, the program impacts on drug-related expectancies (knowledge, attitudes, and norms), drug-related resistance skills, and general competence (personal self-management skills and social skills). Increasing prevention-related drug knowledge and resistance skills can provide adolescents with the information and skills needed to develop anti-drug attitudes and norms, as well as to resist peer and media pressure to use drugs. Teaching effective self-management skills and social skills (improving personal and social competence) offers the potential of producing an impact on a set of psychological factors associated with decreased drug abuse risk (by reducing intrapersonal motivations to use drugs and by reducing vulnerability to pro-drug social influences).

## Theoretical Rationale/Conceptual Framework

Many theories have been advanced to explain drug abuse. The most prominent among these focus on social learning, problem behaviors, self-derogation, persuasive communications, peer clusters, and sensation-seeking. However, the etiology of drug abuse involves a dynamic process which unfolds over many years. A common limitation of most theoretical models is that they are essentially snapshots of the etiology of drug abuse and do not adequately capture the complexity of the problem.

We now know that the initiation of drug use is the result of the complex combination of many diverse factors. There is no single pathway or single variable which serves as a necessary and sufficient condition for the development of either drug use or drug abuse. With this in mind, the LST approach to drug abuse prevention is based on a person-environment interactionist model of drug abuse. Like other types of human behavior, drug abuse is conceptualized as being the result of a dynamic interaction of an individual and his/her environment. Social influences to use drugs (along with the availability of drugs) interact with individual vulnerability. Some individuals may be influenced to use drugs by the media (TV shows and movies glamorizing drug use or suggesting that drug use is normal or socially acceptable as well as advertising efforts to promote the sale of alcohol and tobacco products), by family members who use drugs or convey pro-drug attitudes, and/or by friends and acquaintances who use drugs or hold attitudes and beliefs supportive of drug use. Others may be propelled toward drug use or a drug-using peer group because of intrapersonal factors such as low self-esteem, high anxiety or other dysphoric feelings, or the need for excitement.

Since there are multiple pathways leading initially to drug use and later to drug abuse, a more useful way of conceptualizing drug abuse is from a risk-factor perspective similar to that used in the epidemiology of chronic diseases such as cancer and heart disease. From this perspective, the presence of specific risk factors is less important than their accumulation. As more risk factors accumulate so does the likelihood that an individual will become a drug user and eventually a drug abuser. Thus, the presence of multiple risk factors is associated with both initial drug use and the severity of drug involvement.

It has also been well established that the prevalence of drug use generally increases with age and progresses in a well-defined sequence. Drug use typically begins with the use of alcohol and tobacco first, progressing later to the use of marijuana, and, for some, to the use of stimulants, opiates, hallucinogens, and other illicit substances. Not surprisingly, this progression corresponds exactly to the prevalence and availability of these substances—with alcohol being the most prevalent form of drug use and the most widely available, followed by tobacco (cigarettes) and marijuana. Because alcohol, tobacco, and marijuana are among the first substances used, they have been referred to as "gateway" substances. The use of these "gateway" substances significantly increases the risk of using illicit drugs other than marijuana.

Taking this into account, the LST prevention program targets those "gateway" substances (tobacco, alcohol, and marijuana) that occur at the beginning of the developmental progression. Thus, LST offers the potential for interrupting the normal developmental progression from use of these substances to other forms of drug use/abuse. A second reason for targeting this type of drug use is that the use of these substances accounts for the largest portion of drug-related annual mortality and morbidity.

## Brief Description of Intervention

### Overview

The LST prevention program is a three-year intervention designed to be conducted in school classrooms. Based on the theoretical framework discussed earlier, the LST program was developed to impact on drug-related knowledge, attitudes and norms; teach skills for resisting social influences to use drugs; and promote the development of general personal self-management skills and social skills. Consistent with this, the LST prevention program can best be conceptualized as consisting of three major components. The first component is designed to teach students a set of general self-management skills. The second component focuses on teaching general social skills. The third component includes information and skills that are specifically related to the problem of drug abuse. The first two components are designed to enhance overall personal competence and decrease both the motivations to use drugs and vulnerability to drug use social influences. The problem-specific component is designed to provide students with material relating directly to drug abuse (drug resistance skills, anti-drug attitudes, and anti-drug norms). A complete description of each LST component may be found in the section labeled "Program as Designed and Implemented."

### Program Structure

The LST program consists of fifteen class periods (roughly 45 minutes each) and is intended for middle or junior high school students, depending upon the structure of the school. A booster intervention has also been developed which consists of ten class periods in the second year and five class periods in the third year. This means for school districts with a middle school structure, the LST program can be implemented with students in the sixth grade, followed by booster sessions in the seventh and eighth grades. If the LST program is implemented in a junior high school setting, students receive the program in the seventh grade, and the booster sessions in the eighth and ninth grade, respectively. The rationale for implementing the LST program at this point concerns a variety of factors concerning the developmental progression of drug use, normal cognitive and psychosocial changes occurring at this time, the increasing prominence of the peer group, and issues related to the transition from primary to secondary school.

Drug experts have established that early adolescence is a time of increased risk for experimenting with one or more psychoactive substances. Children first typically experiment with alcohol during the sixth and seventh grades. The greatest proportional change in cigarette smoking occurs between the seventh and eighth grades. Correspondingly, the greatest change in marijuana use takes place between the eighth and ninth grades. Adolescence is also a time of increased reliance on the peer group, separation from parents as they develop a sense of independence and autonomy, and changes in the way individuals think. For example, during this time, individuals begin to shift from a concrete style of thinking that includes a clear sense of right and wrong or absolute rules of behavior to one that is more relative and hypothetical. This enables the adolescent to accept deviation from established rules and to recognize the frequently irrational and inconsistent nature of adult behavior. In addition, it has been noted that the transition from primary to secondary school can be a source of stress that increases risk from problem behaviors such as tobacco, alcohol, and illicit drug use. Finally, the strongest evidence concerning the effectiveness of drug abuse prevention programs is based on evaluation research with programs implemented with individuals during this period.

While the program is effective with just the one year of primary intervention, research also has shown that prevention effects are greatly enhanced when booster sessions are included. For example, two studies have shown that one year of the primary intervention of LST produced reductions of 56-67 percent in smoking without any additional booster sessions; but for those students receiving booster sessions, these reductions were as high as 87 percent. In addition, the booster sessions enhance the durability of prevention effects, so that they do not decay as much over time. LST has been shown to be effective using a variety of service providers including outside health professionals, regular classroom teachers, and peer leaders. Peer counselors are often slightly older (high school) and almost always work in conjunction with a trained adult provider.

## Evidence of Program Effectiveness

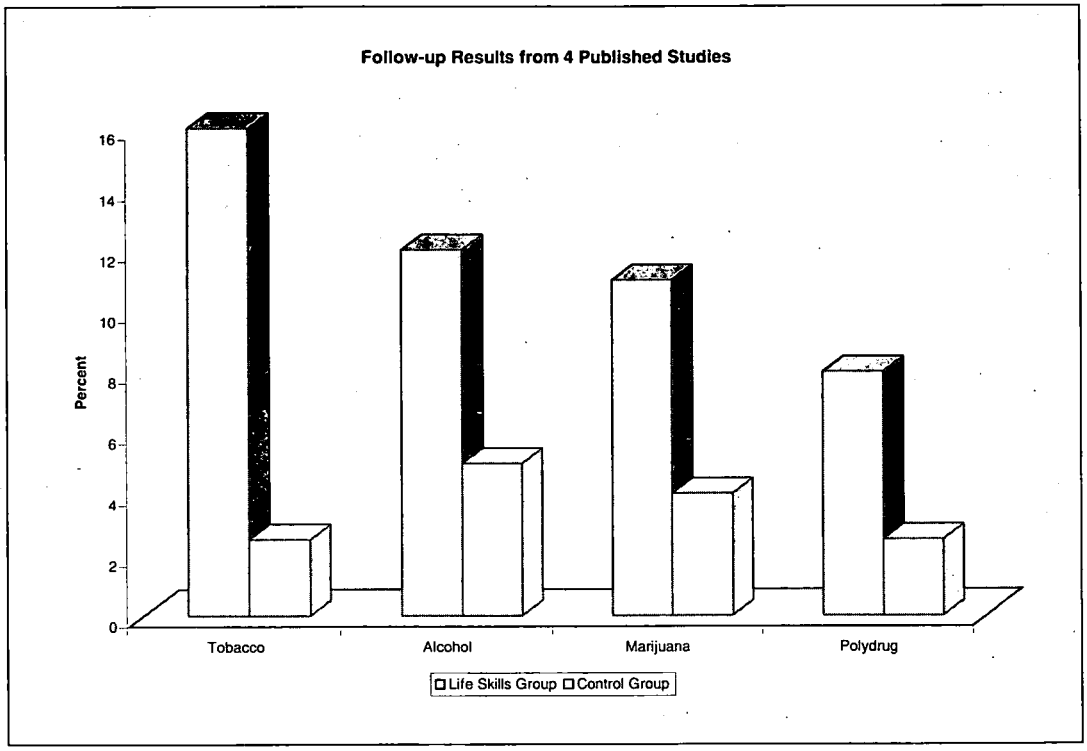
### Overview

Considerable prevention research has been conducted over the past twenty years. Despite the best efforts of educators, health professionals, and drug abuse prevention specialists, a large number of evaluation studies have failed to demonstrate that the prevention approach being utilized was able to produce a measurable impact on drug use behavior. Some studies have demonstrated reductions in attitudes toward drugs and drug use. Others have demonstrated increases in knowledge about drugs or the consequences of using drugs. But, efforts to demonstrate that prevention programs could impact on actual drug use have been disappointing.

### Research with the Life Skills Training Program

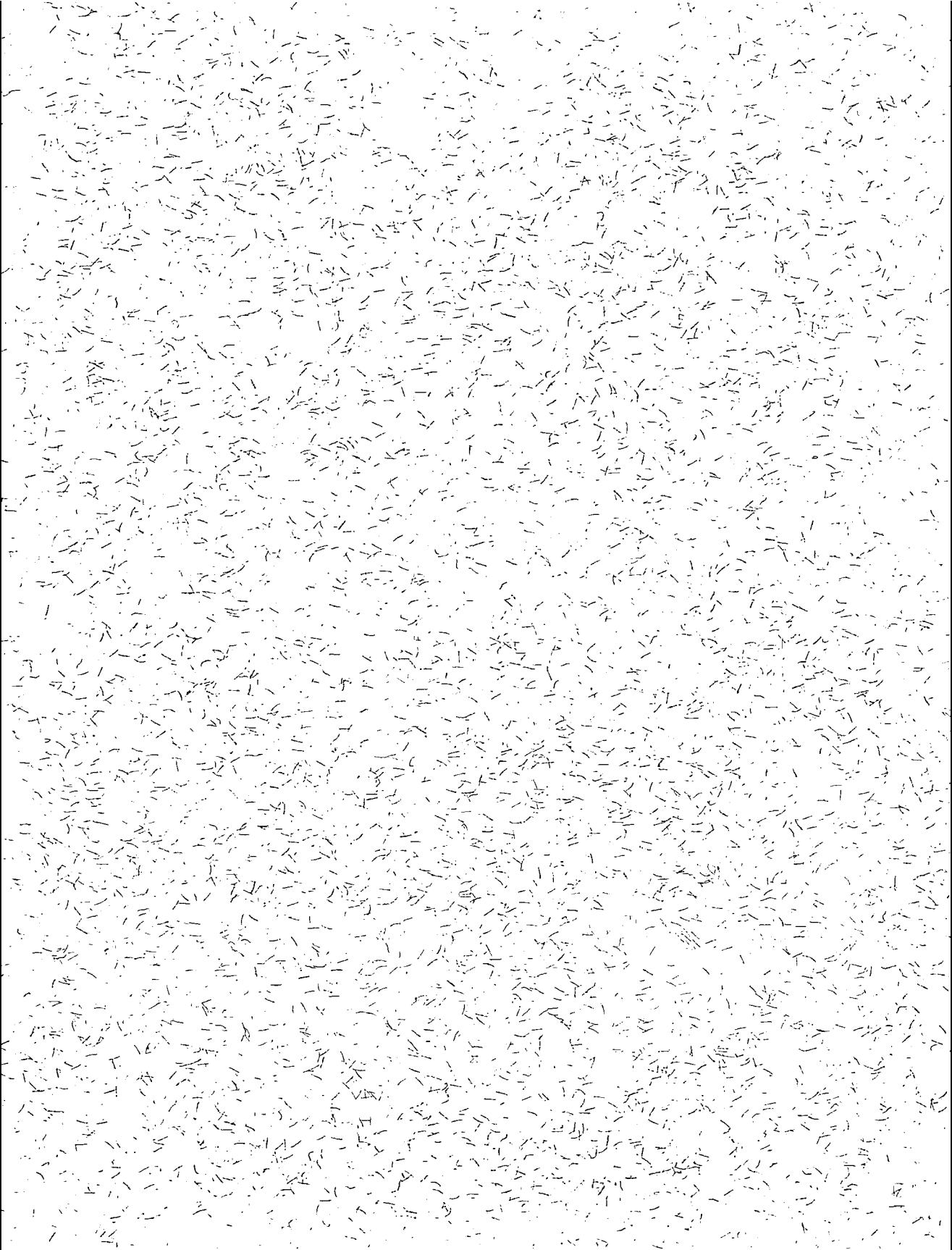
More than one and a half decades of research with the LST program have consistently shown that participation in the program can cut drug use in half. These reductions (relative to controls) in both the prevalence (i.e., proportion of persons in a population who have reported some involvement in a particular offense) and incidence (i.e., the number of offenses which occur in a given population during a specified time interval) of drug use have primarily been with respect to tobacco, alcohol, and marijuana use. These studies have demonstrated that this prevention approach can produce reductions in drug use that are long-lasting and clinically meaningful. For example, long-term follow-up data indicate that reductions in drug use produced with seventh graders can last up to the end of high school. Evaluation research has demonstrated that this prevention approach is effective with a broad range of students including White, middle-class youth and poor inner-city minority (African American and Hispanic/Latino) youth. It has not only demonstrated reductions in the use of tobacco, alcohol, or marijuana use of up to 80 percent, but evaluation studies show that it also can reduce more serious forms of drug involvement such as the weekly use of multiple drugs or reductions in the prevalence of pack-a-day smoking, heavy drinking, or episodes of drunkenness.

The bar chart on page 12 shows the results from four published studies testing the LST program. The first three focus on either tobacco, alcohol, or marijuana use. Results are presented for students who received the LST program during the 7$^{th}$ and 8$^{th}$ grades when compared with control students who did not receive the program. The last set of bars presents long-term follow-up data for students at the end of the 12$^{th}$ grade who received LST during junior high school in grades 7 through 9 when compared with controls in terms of polydrug use (here defined as tobacco, alcohol, and marijuana) one or more times per week. In all four studies, drug use among the LST students was at least half that of the control group.


Follow-up Results from 4 Published Studies
Percent
16
14
12
10
8
6
4
2
0
Tobacco
Alcohol
Marijuana
Polydrug
Life Skills Group
Control Group


# CHAPTER TWO

## Program As Designed And Implemented



# PROGRAM AS DESIGNED AND IMPLEMENTED

## Goals and Measurable Objectives

*The goal of the **Life Skills Training** program is to prevent tobacco, alcohol and drug use among adolescents.* This goal is accomplished by the programs's focus on the development of important personal and social skills. The program's overall objectives include (1) decreasing drug abuse risk by reducing *intrapersonal* motivations to use drugs and (2) reducing vulnerability to pro-drug social influences. This is accomplished by providing adolescents with the knowledge and skills to:

- Resist peer and media pressure to smoke, drink, or use drugs
- Develop a positive self-image
- Make decisions and solve problems on their own
- Manage anxiety
- Communicate effectively and avoid misunderstandings
- Build healthy relationships
- Handle social situations with confidence

While increasing academic performance or participation are not stated goals of the program, research evidence shows that drug abuse is a significant barrier to the achievement of educational objectives, so that successful prevention approaches such as LST are likely to enhance academic performance. However, to date, the LST program has not been evaluated with respect to academic outcomes.

## Targeted Risk and Protective Factors and Population

### Targeted Risk and Protective Factors

The results of research into the causes of drug use and the progression to more serious levels of drug involvement indicate that drug abuse is the result of the complex combination of many diverse factors. There is no single factor or single pathway which serves as a necessary and sufficient condition for the development of drug abuse. Factors associated with drug abuse can be grouped into broad categories or domains highlighting the importance of an array of socio-cultural factors, biological/genetic factors, interpersonal factors, and intrapersonal factors. Some of these risk factors increase risk for drug involvement, while other (protective) factors decrease the potential for becoming involved with drugs.

Socio-cultural factors consist of a collection of background variables found to be associated with drug abuse such as:

- demographic factors (age, gender, social class),
- cultural factors (ethnic identity, acculturation), and
- availability of drugs.

Biological and genetic factors include:

- temperament, and
- sensation-seeking.

Social/environmental factors include:

- community factors (community resources, neighborhood organization),
- school factors (school bonding, school size, school climate),
- family factors (family management practices, communication, discipline, monitoring, parental drug use, parental attitudes toward drug use),
- media influences promoting attitudes and norms conducive to drug use (TV shows, movies),
- peer influences (friends' drug use, pro-drug attitudes).

Individual-level risk factors include:

- drug-related expectancies (knowledge, attitudes, norms),
- drug-related resistance skills, and
- general competence (personal self-management skills; social skills).

LST modifies drug-related expectancies and resistance skills so that adolescents have the information and skills needed to promote the development of anti-drug attitudes and norms as well as resist peer and media pressure to use drugs. Facilitating the development of effective self-management skills and social skills offers the potential of reducing psychological motivations to use drugs and of reducing vulnerability to social influences to use drugs.

The LST program may offer the potential for reducing risk for violence, delinquency, teenage pregnancy, and AIDS as well. Substance use and abuse have been found to be highly correlated with a variety of problem behaviors. It is important to note that substance abuse does not occur in a vacuum but rather appears to be part of a general syndrome or life-style reflecting a particular value orientation. Individuals who smoke, drink, or use drugs tend to get lower grades in school, are not generally involved in adult-sanctioned activities such as sports and clubs, and are more likely than nonusers to exhibit antisocial patterns of behavior including aggressiveness, lying, stealing, and cheating. Substance use has been found to be related to premature sexual activity, truancy, and delinquency. The finding that different types of problem behaviors are part of a general syndrome or collection of highly associated behaviors suggests that they may have the same or highly similar causes. Therefore, the LST program may offer the potential for reducing risk for violence, delinquency, teenage pregnancy, and AIDS in addition to substance abuse. At this time, there is no direct evidence for these effects; future research may indeed provide that documentation.

***Life Skills Training is a primary prevention program intended to target individuals who have not yet developed drug abuse problems. It has been designed for use with middle or junior high school students.***

**Targeted Population**

The LST program has been designed for use with middle or junior high school students. Ideally, the program should be conducted with seventh graders, although significant results have been obtained with both eighth and ninth graders. A booster intervention has also been developed which consists of ten class periods in the second year and five class periods in the third year. Thus, one intervention model might involve conducting the LST program in the seventh grade, with addi-

tional booster sessions being conducted in the eighth and ninth grades. For middle schools, the first year of the program should be in grade six.

The LST program is a *primary* prevention program. It is intended to target individuals who have not yet developed drug abuse problems—to prevent the early stages of drug abuse by impacting on risk factors associated with drug abuse, particularly occasional or experimental use. Underlying this is the premise that preventing drug use with younger populations (e.g., junior high school students) will ultimately reduce the prevalence of drug abuse among these same individuals as they become older (e.g., seniors in high school). Another way of describing the LST approach is that it is designed for all individuals in a given setting. As such, it is frequently referred to as a *universal* intervention as opposed to a selective or targeted intervention which is for individuals identified as being at "high risk."

Evaluation studies have been conducted to test the generalizability of the LST approach. The program has been found to be effective with White, African American, and Hispanic/Latino youth. A more detailed description of the research testing the effectiveness of the LST approach with multiethnic youth may be found in the Evaluation section.

## Program as Designed

### *Program Content*

#### Program Overview

The LST program consists of 12 units which are designed to be taught in sequence. There are 15 class periods (roughly 45 minutes each) in the first year, a total of 30 over three years. The program can be integrated into any subject area, although health education and science are probably the most appropriate. Table 1 lists the eight major content areas of the LST program and the suggested number of class periods for each component, followed by the units applicable to each component. The LST prevention program can best be conceptualized as consisting of two general skills training components to enhance overall personal competence (Personal Self-Management Skills and Social Skills) and a problem-specific component relating to drug abuse (Drug-Related Information and Skills).

**Table 1. Content and Structure of the LST Intervention by Grade Level**

| Content Areas/Units | Number of Classes Per Grade 7th | 8th | 9th |
|---|---|---|---|
| 1. Substance Use Information<br>. Smoking: Myths and Realities (DRIS)<br>. Smoking and Biofeedback (DRIS)<br>. Alcohol: Myths and Realities (DRIS)<br>. Marijuana: Myths and Realities (DRIS) | 4 | 1 | 0 |
| 2. Decision Making<br>. Decision Making (PM) | 2 | 1 | 1 |
| 3. Media Influences<br>. Advertising (DRIS) | 1 | 1 | 0 |
| 4. Self-directed Behavior Change<br>. Self-Image and Self-Improvement (PM) | 1 | 0 | 0 |
| 5. Anxiety Management<br>. Coping with Anxiety (PM) | 2 | 2 | 1 |
| 6. Communication Skills<br>. Communication Skills (SS) | 1 | 1 | 0 |
| 7. Social Skills<br>. Social Skills (A) (SS)<br>. Social Skills (B) (SS) | 2 | 1 | 1 |
| 8. Assertiveness<br>. Assertiveness (SS) | 2 | 3 | 2 |

PM = personal management skills
SS = social skills
DRIS = drug related information skills

**Personal Self-Management Skills**

The personal skills component of the LST program is designed to impact on an array of self-management skills. To accomplish this, the personal skills component contains material to (1) foster the development of decision-making and problem-solving (e.g., identifying problem situations, defining goals, generating alternative solutions, considering consequences); (2) teach skills for identifying, analyzing, interpreting and resisting media influences; (3) provide students with self-control skills for coping with anxiety (e.g., relaxation training) and anger/frustration (inhibiting impulsive reactions, reframing, using self-statements); and (4) provide students with the basic principles of personal behavior change and self-improvement (e.g., goal-setting, self-monitoring, and self-reinforcement). Examples of activities for personal self-management skills include:

- relaxation training using a relaxation tape with the class;
- brainstorming problem situations and having each student orally clarify the decision to be made, consider alternatives, and choose based upon careful consideration of consequences;
- listing decisions they must make every day and the ways in which other people influence those decisions; and
- involving students in a self-improvement project (e.g., to learn the principles of personal behavior change, each student chooses something about themselves that they would like to change or a skill they would like to learn, for example, to get along better with a parent; the student picks achievable goals and objectives and works on the project throughout the intervention).

**Social Skills**

The social skills component is designed to impact on several important social skills and enhance general social competence. The social skills component contains material designed to help students overcome shyness and improve general interpersonal skills. This material emphasizes the teaching of: (1) communication skills; (2) general social skills (e.g., initiating social interactions, conversational skills, complimenting); (3) skills related to dating relationships; and (4) both verbal and nonverbal assertive skills. The following is an example of a social skills activity:

- brainstorming and then using behavioral rehearsal for difficult social situations, such as asking someone out, initiating conversation at a gathering, etc.

**Drug-Related Information and Skills**

This component is designed to impact on knowledge and attitudes concerning drug use, normative expectations, and skills for resisting drug use influences from the media and peers. The material contained in this component is similar to that contained in many psychosocial drug abuse prevention programs which focus on the teaching of social resistance skills. Included is material concerning the (1) short- and long-term consequences of drug use; (2) knowledge about the actual levels of drug use among both adults and adolescents in order to correct normative expectations about drug use; (3) information about the declining social acceptability of cigarette smoking and other drug use; (4) information and class exercises demonstrating the immediate physiological effects of cigarette smoking; (5) material concerning media pressures to smoke, drink, or use drugs; (6) information concerning the techniques used by cigarette and alcoholic beverage advertisers to promote the use of these

drugs and skills for resisting them; and (7) techniques for resisting direct peer pressure to smoke, drink, or use drugs. Examples of activities related to teaching drug-related information and skills include:

- having students bring in advertisements for tobacco and alcohol and analyzing them; and
- having students practice, through behavioral rehearsal, resisting pressure to smoke, drink, or do drugs.

### Booster Intervention

In addition to the initial (primary) year of intervention, the LST approach contains a two-year booster intervention designed to be implemented in grades seven and eight and grades eight and nine, depending on when the first year of the program was received. Designed to reinforce the material covered during the first year, the drug abuse prevention booster curriculum consists of ten sessions in grade eight and five sessions in grade nine. The focus of the personal and social skills components is on the continued development of the general life skills which enable students to cope more effectively with the various pressures and problems confronting them as adolescents. The booster years give the students the opportunity to practice these skills, thereby reducing their vulnerability to drug use.

***In addition to the first year of intervention, Life Skills Training contains a two-year booster intervention designed to be implemented in the two years following the initial intervention.***

### Program Materials

Curriculum materials have been developed to increase the standardization of implementing the LST program and increase its exportability. The curriculum materials consist of a *Teacher's Manual, Student Guide,* and *audio cassette tape* for each year of the program. The *Teacher's Manual* (Table of Contents provided in Appendix B) contains detailed lesson plans consisting of the appropriate content and activities for each intervention session as well as an overall unit goal and session objectives (see Appendix C). The *Student Guide* contains reference material for each session, class exercises, and homework assignments to both prepare students for specific sessions and to reinforce the skills and information already covered. The *Student Guide* also contains goal-setting principles, basic principles of self-directed behavior change, and material for a semester long "self-improvement" project. The audio cassette tape contains several relaxation exercises led by Dr. Gilbert J. Botvin.

## *Intervention Methods*

The LST program is taught using a variety of intervention methods including the use of traditional didactic teaching methods, facilitation/group discussion, classroom demonstrations, and cognitive-behavioral skills training. Although lecturing and conventional didactic teaching methods are appropriate for some of the material taught in the LST program, most of the material can be more effectively taught by facilitating group discussion and skills training, with skills training being clearly the primary intervention method. Since a major emphasis of the LST program is on the teaching of general personal self-management skills, social skills, and skills for resisting social influences to use drugs, the central role of intervention providers is that of skills trainer or coach. The cognitive-behavioral

skills taught in the LST program are taught using a combination of instruction, demonstration, behavioral rehearsal, feedback, social reinforcement (i.e., praise), and extended practice in the form of behavioral homework assignments.

In order for the LST program to be effective, students must ultimately learn to use the skills taught in the program in real life situations. This process of transfer can be facilitated in two ways, both of which are discussed in the training workshop. First, the LST program includes behavioral "homework" assignments that are designed to facilitate transfer of the skills taught in the program as well as to provide opportunities for students to practice and develop confidence using these skills. Second, teachers are asked to continue providing feedback and reinforcement for using these skills whenever they interact with students outside of the classroom. Another transfer mechanism may be available in the future when a parent component, introduced in a recent study, is added to the prevention program. This component provided parents with an opportunity to become involved in behavioral "homework" assignments as well as exposing them to the skills and information being taught in the LST program so that they could also help facilitate the transfer process by providing feedback and reinforcement for their children.

### *Adaptive Features*

It is important that trainers cover the goals and objectives of the program and that they use the interactive teaching styles of facilitation, coaching, and behavioral rehearsal. Beyond that, the program is flexible and allows for the creativity of the individual teacher when implementing the activities. However, existing research has shown that the program is the most effective when it is carefully and completely implemented. Modifications to the program may inadvertently reduce its effectiveness.

Although research has demonstrated the generalizability of the LST approach to multiethnic youth, it is often argued that the strongest prevention effects were likely to come from an intervention approach tailored to the specific population being targeted. A recently completed study tested the relative effectiveness of the LST approach and a prevention approach specifically tailored to African American and Hispanic/Latino youth. Both prevention approaches were similar in that they taught students a combination of generic "life skills" and skills specific to resisting offers to use drugs. However, the tailored or culturally-focused approach was designed to embed the skills training material in myths and legends derived from the African American and Hispanic/Latino cultures. Six junior high schools containing predominantly (95 percent) multiethnic students were assigned to receive one of the following: (1) the LST program, (2) the culturally-focused prevention approach in which the content is the same but the images used are more specific to the targeted group, or (3) serve as an information-only control group. The sample was 48 percent African American, 37 percent Hispanic/Latino, 5 percent White, 3 percent Asian, and 8 percent other. Students were pretested and posttested during the seventh grade.

Results indicated that students in both skills training prevention conditions had lower intentions to drink beer or wine relative to the information-only controls, and the students in the LST condition had lower intentions to drink hard liquor and use illicit drugs. Both skills training conditions also impacted on several mediating variables in a direction consistent with non-drug use. According to these results, both prevention approaches were equally effective, producing significant reductions in behavioral intentions to drink and use illicit drugs, and suggesting that a generic drug abuse

prevention approach with high generalizability may be as effective as one which is tailored to individual ethnic populations. These data, therefore, provide support for the hypothesis that a single drug abuse prevention strategy can be used effectively with multiethnic populations. The final version of LST incorporates multiethnic images and examples as an integral component of the curriculum. For example, in the brainstorming and behavioral rehearsal exercises, the students use their own words and real-life situations and places to role play. In addition, the graphic images in the curriculum show an ethnic and racially diverse population.

## Planning and Implementation

### *Overview*

The LST program is a completely self-contained prevention curriculum. To implement the program, all that is required is a curriculum set consisting of a Life Skills Training Teacher's Manual, Student Guide, relaxation tape, and a qualified program provider (e.g. teacher, counselor, or health professional).

### *Funding and Program Costs*

The program is packaged as a curriculum set consisting of a Teacher's Manual, relaxation tape, and thirty Student Guides. There is a curriculum set for each program year. The cost of each curriculum set is as follows: year one (sixth/seventh grade), $275.00; year two (seventh/eighth grade), $225.00; and year three (eighth/ninth grade), $175.00. A full set consisting of prevention materials for years one, two, and three is available at a cost of $625.00. The curriculum is available through the *Princeton Health Press, Inc.* at 115 Wall Street, Princeton, New Jersey, 08540.

***The Life Skills Training program has been successfully implemented by health professionals, older peer leaders, and regular classroom teachers.***

### *Staffing and Supervision*

The LST program has been successfully implemented by several different types of intervention providers. These have included *health professionals* from outside the school, *older peer leaders*, and *regular classroom teachers*. Since prevention effects can be produced with classroom teachers, as well as other types of providers, and since teachers are readily available, the most natural and logical provider for a school-based prevention program is a regular classroom teacher.

In addition to availability, teachers are a logical choice because they generally have more teaching experience and better classroom management skills than other potential intervention providers. Peer leaders (same-age or older students) can assist the teachers in implementing the curriculum and serve an important informal function as positive role models for the kinds of skills and behavior being taught in the curriculum.

Selection of program providers should be based on their interest, experience, enthusiasm, and commitment to drug abuse prevention; the extent to which they will be a positive role model; and their willingness to attend the training workshop and implement the intervention carefully and completely according to the provider's guide. To enhance the potential for delivering the prevention program carefully and completely according to the intervention protocol, care should be taken in recruiting providers to engender a spirit of collaboration.

### *Training of Staff*

Provider training generally consists of a one- or two-day training workshop. LST has successful outcomes with the one-day training, and there may be many situations where that is all the time that is available for training. However, a two-day training is the preferred training approach. The one-day training has fewer practice sessions and model lessons than the two-day training, but covers all the essential elements to deliver the program effectively. The purpose of the training workshop is to familiarize intervention providers with the prevention program and its rationale, the results of prior studies, and to provide them with an opportunity to learn and practice the skills needed to successfully implement the prevention program.

In an effort to improve implementation fidelity, the original provider training model used in previous studies testing the LST intervention has been modified to increase the knowledge, skills, and confidence that program providers need to effectively implement this type of prevention program. The length of the workshop has been increased from one day to two days, new material has been added concerning state-of-the-art prevention methods and evidence of their effectiveness, and more time has been allocated for practicing key intervention components. The current provider training workshop is less didactic, more interactive, and emphasizes the use of well-established skills training techniques such as instruction, demonstration, feedback, reinforcement, and practice. Additional information and cost of training workshops are available through Princeton Health Press.

In general, training costs are $100 per participant per day, typically with a minimum of 20 people per workshop (i.e., a minimum of $2,000 per day) plus travel expenses.

### *Setting*

Although schools are the most logical setting for implementing health and drug abuse prevention programs such as LST, because they provide the most efficient access to large numbers of children and adolescents, LST can be implemented in environments other than the school. In the past, this has included community-based organizations such as Boys Clubs, homeless shelters, housing projects, and community centers. Indeed, LST is quite adaptable and flexible, and can be used in virtually any setting involving youth.

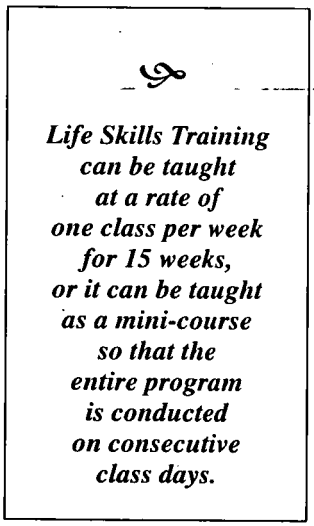
Still, the school is the most appropriate setting for implementing LST. Many states mandate schools to provide programs in health education and/or drug abuse prevention. In addition, educators recognize that drug abuse has negative effects on attainment of educational objectives. As a consequence, the U.S. Department of Education, state education agencies, and local school systems have all given increasing priority in recent years to implementing effective drug abuse prevention programs in an effort to promote "safe and drug-free schools."

If implemented in a school setting, the most logical academic area for delivering LST is in health or drug education since these areas provide a natural framework through which LST can be delivered, but the curriculum also has been programmed into nearly all conceivable slots in the academic schedule including science, social studies, and physical education. Schools conducting the LST program have exhibited tremendous creativity and flexibility in identifying a wide range of possible ways of scheduling LST. No clear evidence exists at this point regarding which subject area is most conducive to implementing the LST program.

### *Implementing Life Skills Training*

The LST program is a school-based intervention designed to be implemented in the classroom. It is implemented with either middle or junior high school students. Where schools have a middle school structure, the program is implemented with sixth, seventh, and eighth graders. Where there is a junior high school structure, the program is implemented with seventh, eighth, and ninth graders. The prevention program is typically implemented by regular classroom teachers, although some studies have tested the effectiveness of this prevention program when implemented by older or same-age peer leaders or by outside health professionals (e.g., health educators).

There are two ways to implement LST in the classroom. The program can be scheduled so that it is taught at a rate of one class per week. For most schools, class periods are between 40 and 50 minutes long. The initial year of the LST program is fifteen class periods long. Therefore, this would take fifteen weeks to conduct using this scheduling format. Subsequent years (booster sessions) require less time—ten weeks in the second year and five weeks in the third year.




It can also be programmed as a curriculum module or mini-course so that the entire program is conducted on consecutive class days. Depending on the subject area through which the LST program is offered, this may mean that the program is conducted two or more times per week on consecutive days. Both scheduling formats have been found to be effective in evaluation studies, although the evidence from one study suggests that the more intensive module or mini-course format may produce somewhat better results.

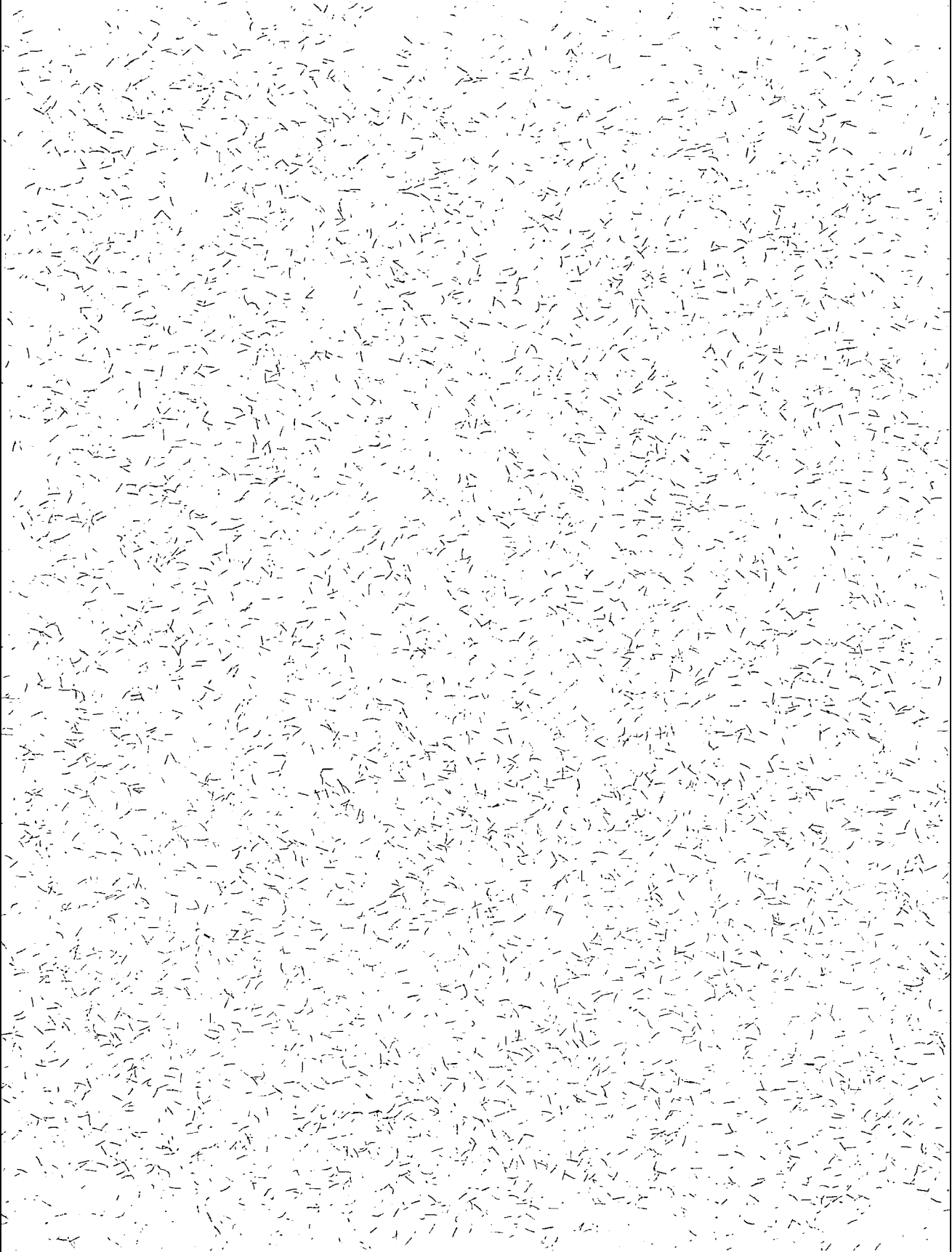
LST is a prescribed prevention program but has some implementation flexibility. It can be implemented in a number of different curriculum slots such as health education or drug education, if available, or through a major subject area such as science or social studies. Generally, it is implemented in a single subject area and taught by one teacher. However, some schools have implemented the program through more than one subject area where students are being taught by a team of teachers.

No major changes or modifications have been made in the implementation of the program over the years in terms of the modalities used. The content has been modified periodically in order to keep it up-to-date (for example, new statistics have been included as warranted on the prevalence of drug use). Another change has more to do with emphasis than an actual modification. It became clear early on that it was important to emphasize the need to utilize proven skills training techniques when teaching the prevention program. Otherwise, some teachers might rely on didactic teaching methods instead of skills training methods including a combination of instruction, demonstration, practice, feedback, reinforcement, and extended practice through behavioral homework assignments. This was addressed by stressing the importance of using effective skills training methods in the provider training workshops.

### *Monitoring Implementation and Treatment Integrity*

Several of the studies conducted in the past few years have indicated that in order to be optimally effective the LST program must be implemented carefully and completely. These studies show, not surprisingly, that if the program is poorly implemented or the material in the LST program is only partially covered, it is not likely to be effective. Students who received only a small portion of the program have been found to be similar to the control group in terms of their level of drug use. Students receiving most of the program had levels of drug use which were substantially lower than controls who did not receive any of the LST program. Students who received about half of the program were generally somewhere between the students receiving a high quality implementation and control students. Thus, these studies have shown a clear relationship between the fidelity of program implementation and program effectiveness. Process evaluation forms (i.e., to indicate whether each lesson has been implemented in the classroom as originally intended) are located in Appendix D. Process evaluation forms are used to measure the degree to which the LST program is implemented as it was designed to be implemented. During research testing the LST program, classes were randomly selected to be visited by a project staff member who observed the program being implemented and recorded how faithfully the sessions observed were delivered. The main focus of these classroom observations was in terms of how completely session goals and objectives outlined in the teachers' manual were covered. In addition to using these forms to monitor the fidelity of the LST program while it is being implemented, these forms can also be used by teachers as a self-evaluation checklist to remind them to implement the prevention program carefully and completely.


# CHAPTER THREE
## Evaluation



# EVALUATION

## Historical Context

Given the fact that the history of drug abuse prevention is full of countless theories and intervention strategies which failed to withstand the scrutiny of evaluation research, clearly the most serious challenge to the field of drug abuse prevention has been to prove that prevention works. Some approaches were easily shown to have an impact on knowledge and, in some cases, even on attitudes in a direction consistent with decreased drug abuse risk. But, this is weak proof that prevention works. The gold standard of whether or not a preventive intervention works is the extent to which it can impact on drug use *behavior* (i.e., reduce the incidence or prevalence of drug use). Using this as the standard, little credible evidence existed that drug abuse prevention worked until the end of the 1970s and beginning of the 1980s. Since then, considerable research has been conducted leading to several promising prevention approaches, including the ***Life Skills Training*** program.

During the 1980s and up to the present, a series of evaluation studies has been conducted in order to test the effectiveness of drug abuse prevention approaches based on the LST model. These studies have been conducted in a logical sequence intended to facilitate the development of a prevention approach that is effective with different problem behaviors, when implemented by different types of providers, and with different populations. The focus of the early LST research was on cigarette smoking and involved predominantly White, middle-class populations. More recent research extended this work to other problem behaviors including the use of alcohol, marijuana, and most recently illicit drugs other than marijuana. In addition, this research has increasingly focused on the utility of the LST approach when used with inner-city, minority populations. Finally, this research has assessed the long-term durability of the LST prevention model, its impact on hypothesized mediating variables, implementation fidelity, and methods of improving implementation fidelity. These studies are briefly described below along with the key findings, and are also summarized at the end of this section in Table 2.

## General Strategy for Studies

In small-scale, pilot studies, schools were matched and then randomly assigned to condition. In the larger studies, schools were stratified in terms of substance use (to control for potentially different rates of substance use at baseline) prior to randomization. In other words, schools were typically divided into groups according to substance use rates before being randomly assigned to prevention and control conditions in order to control for possible differences in the rates of substance use and increase the likelihood that conditions would be equivalent. In addition, all of the major studies with the LST program have included statistical evidence of initial equivalence of the experimental conditions.

Percent reduction in drug use is based on a comparison of posttest mean rates of drug use for treatment and control groups. Where appropriate, posttest rates are adjusted for pretest use and other relevant covariates such as gender. For example, if the treatment group had a posttest rate of monthly cigarette smoking of 4 percent and the control group had a posttest smoking rate of 10 percent, there is a relative reduction in cigarette smoking prevalence of 60 percent. This is calculated by taking the difference between the treatment and control group rates (10 percent minus 4 percent = 6 percent) and then dividing that by the control group rate (6 percent divided by 10 percent = 60 percent).

### Preventing Cigarette Smoking

The LST program was initially developed as a smoking prevention program. Pilot research (Botvin, Eng, & Williams, 1980) examined the short-term effectiveness of the LST approach for preventing cigarette smoking. Participants were 281 students in the eighth, ninth, or tenth grades of two comparable suburban schools which were randomly assigned to either the experimental condition, in which students received the ten session prevention program or served as a comparison control group. The prevention program was conducted by health professionals who were members of the project staff. Results of this study found a 75 percent reduction in the number of new cigarette smokers at the initial posttest and a 67 percent reduction in new smoking at the three-month follow-up.

### Effectiveness of Peer Leaders

A second study (Botvin & Eng, 1982) tested the effectiveness of this prevention approach when implemented by older peer leaders (eleventh and twelfth graders) with seventh graders ($n = 426$). In order to dramatize the immediate physical effects of cigarette smoking, a unit was added to the prevention program which used biofeedback apparatus in class experiments. A methodological improvement introduced in this study to enhance the validity of smoking self-report data and to provide an objective measure of smoking status (saliva thiocyanate) involved the collection of saliva samples prior to the collection of self-report data which confirmed analyses by self-report data. Posttest results indicated that there were significantly fewer new smokers in the experimental group. These results were corroborated by the results of the saliva thiocyanate (SCN) analysis which showed a significant increase in smoking for the students in the control group, but no increase for students in the experimental group. In addition, there was a 58 percent reduction in new smoking at the initial posttest and a 56 percent reduction in regular (weekly) smoking at the one-year follow-up. Significant treatment effects were also found on several hypothesized mediating variables including smoking knowledge, psychosocial and advertising knowledge, social anxiety, and influenceability.

### Teachers, Scheduling Format, and Boosters Effects

A third study (Botvin, Renick, & Baker, 1983) examined several important prevention issues. First, this study was designed to test the efficacy of this prevention approach when implemented by regular teachers. Second, it was designed to test two different implementation schedules. Third, it was designed to examine the efficacy of booster sessions for preserving initial prevention effects. Seventh grade students ($n = 902$) from seven suburban New York schools were randomly assigned to four conditions: a treatment condition which involved conducting the prevention program once a week for fifteen weeks (E1), a treatment condition which involved conducting the program several times a week for about five weeks (E2), a treatment condition receiving additional booster sessions, and a control condition. As in the previous study, saliva samples were collected to ensure high quality self-report data.

Significant treatment effects were found at the initial posttest using the monthly measure of cigarette smoking. Comparison of the relative effectiveness of the integrated weekly intervention format (E1) and the intensive mini-course format (E2) indicated that both conditions were equally effective in preventing the onset of new (monthly) smoking. Significant intervention effects for monthly, weekly, and daily smoking were found at the one-year follow-up. Students receiving additional booster sessions had half as many regular (weekly or daily) smokers as those not receiving booster sessions. Follow-up one and a half years

after the conclusion of the prevention program showed reduced smoking onset rates for the monthly, weekly, and daily smoking. These findings provided additional empirical support for the efficacy of the LST prevention program, this time when conducted by regular classroom teachers. These findings also indicated that it is effective when implemented according to two different schedules (an integrated weekly schedule or as a mini-course taught several times a week). However, perhaps the most important finding of this study was to demonstrate the potential of booster sessions for maintaining and even enhancing the effects of the prevention program.

**Preventing Alcohol Use**

Several studies were conducted to determine the efficacy of this prevention approach with other types of substance use. The first of these tested the impact of the LST prevention program on alcohol use frequency, episodes of drunkenness, and heavy drinking. The study was conducted with seventh graders from two comparable New York City public schools ($n$ = 239) randomly assigned to experimental and control conditions (Botvin, Baker, Botvin, Filazzola, & Millman, 1984). The intervention was modified to include material concerning the potential consequences of alcohol use and, where appropriate, skills were taught in relation to situations that might promote alcohol use. Although no effects were evident at the initial posttest, program effects emerged at the six-month follow-up. Significantly fewer (54 percent) experimental students reported drinking in the past month, 73 percent fewer reported heavy drinking, and 79 percent fewer reported getting drunk at least once a month.

**Preventing Alcohol and Marijuana Use**

Following the study testing the effectiveness of the LST program with alcohol, a larger study was conducted to replicate the alcohol results, test the generalizability of the LST approach to marijuana use, and test the relative effectiveness of this type of prevention strategy when implemented by older (tenth and eleventh grade) peer leaders or regular classroom teachers. The study included 1,311 seventh grade students from ten suburban New York junior high schools which were randomly assigned to: (1) teacher-led prevention curriculum, (2) peer-led prevention curriculum, (3) teacher-led prevention curriculum and booster sessions, (4) peer-led prevention curriculum and booster sessions, and (5) a control group.

Results at the initial posttest (Botvin, Baker, Renick, Filazzola, & Botvin, 1984) showed significant prevention effects for tobacco, alcohol, and marijuana use. Adolescents who participated in the LST program drank significantly less alcohol per drinking occasion and were drunk less often, with the students in the peer-led condition being superior to the students in both the teacher-led and control conditions. With respect to marijuana, not only were there fewer students reporting monthly and weekly marijuana use, but the magnitude of these effects was quite substantial. The LST program reduced experimental marijuana use by 71 percent for students in the peer-led condition and regular (weekly or daily) marijuana use by 83 percent. Effects were also evident on several cognitive, attitudinal, and personality variables in a direction consistent with decreased drug use risk.

One-year follow-up results from this study (Botvin, Baker, Filazzola, & Botvin, 1990) provide further support for the effectiveness of the LST prevention approach. Depending on the measure used, there were 79 to 82 percent fewer smokers in the peer-led booster group and 69 to 78 percent fewer marijuana users; 44 to 50 percent fewer smokers in the high fidelity teacher-led group, 47 percent fewer experimenters with marijuana, and 51 percent fewer drinkers.

### Evaluation Results from a Large-Scale Prevention Trial

One of the largest and most methodologically rigorous prevention studies ever conducted began in 1985. This randomized prevention trial involved students ($n$ = 5,954) from 56 schools in New York State. Of the original 5,954 seventh grade students, 4,466 (75 percent) provided data at both the pretest and final posttest. The focus of this study was on the efficacy of the LST approach for preventing the use of all three gateway substances—tobacco, alcohol, and marijuana (Botvin, Baker, Dusenbury, Tortu, & Botvin, 1990). The sample was approximately half (52 percent) male and predominantly (91 percent) White. With spring 1985 smoking rates used as a blocking variable, schools within each of three geographic regions of New York State were randomly assigned to E1 (prevention program with training and support by project staff), E2 (prevention program with no project staff involvement), and control conditions. Sample retention (based on all available students at the pretest) was 93 percent at the initial posttest (mid-seventh grade), 81 percent at the 16-month follow-up (end of the eighth grade), 75 percent at the 28-month follow-up (end of the ninth grade), and 67 percent at the 40-month follow-up (end of the tenth grade). Retention rates were virtually identical across conditions. Figure 2 presents a graphic illustration of retention rates.

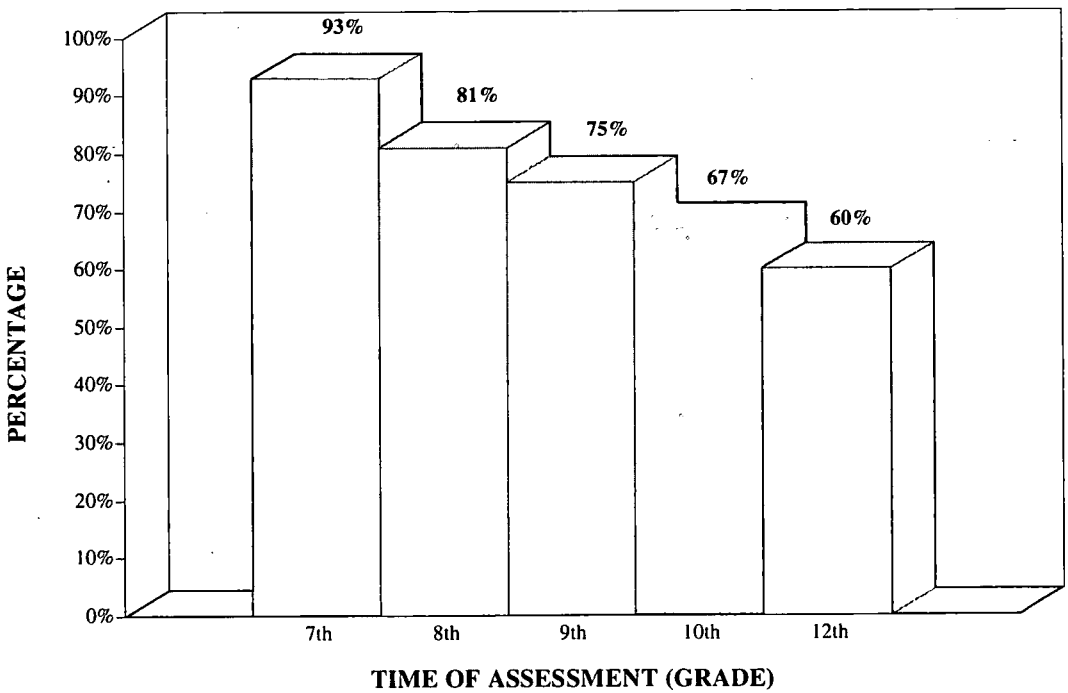
Using both the *individual* and the *school* as the unit of analysis, prevention effects were found for drug use behavior as well as for several hypothesized mediating variables at the 28-month follow-up and the 40-month follow-up for students who received at least 60 percent of the intervention program. The results of the individual-level analysis at the 28-month follow-up found significantly less smoking and marijuana use among the E1 and E2 groups, and less problem drinking in the E2 group than among controls. Results of the school-level analysis at the 28-month follow-up revealed that both the E1 and E2 groups had significantly less cigarette smoking than controls. At the 40-month follow-up, there was significantly less marijuana use in the E1 group and less excessive drinking in both the E1 and E2 groups than among controls.

### Evidence of Long-Term Effectiveness

Although a growing number of evaluation studies have demonstrated prevention effects, these studies typically focus on short-term effectiveness. In order to determine the durability of drug abuse prevention in general and the LST approach in particular, a long-term follow-up study was conducted (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995). Students ($n$ = 3,597) from 56 schools in New York State who participated in the drug abuse prevention trial described above, starting in the fall of 1985 (when they were in the seventh grade), were located and data were collected at the end of the twelfth grade in school, by telephone, and/or by mail. The average length of follow-up was six years after the initial baseline assessment. Follow-up results indicated that there were significantly fewer smokers, "heavy" drinkers, or marijuana users for students who received the LST prevention program during the seventh grade and had booster sessions during the eighth and ninth grades.

In order to assess the impact of the prevention program on more serious levels of drug involvement, experimental and control students were also compared in terms of polydrug use (defined in this study as the monthly or weekly use of multiple gateway substances). At the end of the twelfth grade, there were 44 percent fewer LST students than controls who used all three gateway drugs (tobacco, alcohol, and marijuana) one or more times per month, and 66 percent fewer LST students who reported using all three substances one or more times per week. Prevention effects were also found for twelve hypothesized mediating variables in the direction of decreased drug abuse risk. The

**Figure 2. Retention Rates for Baseline Sample (N=5,954) at Initial Posttest and Annual Follow-Up Assessments**




strongest prevention effects were produced for the students who received the most complete implementation of the prevention program.

Finally, while prevention effects were produced regardless of whether providers were trained at a formal training workshop with periodic feedback and consultation from project staff or merely viewed a provider training videotape without feedback or support, the strongest effects were produced by the teachers who attended annual training workshops and received ongoing support. Prevention effects were found using both the individual and school as the unit of analysis. A potential weakness of long-term follow-up studies concerns differential attrition which can either undermine the initial (pretest) equivalence of the treatment and control groups and make it impossible to determine whether any observed follow-up effects are the result of the intervention or are the result of differential attrition. In this study, attrition rates were equivalent for treatment and control conditions, as were pretest levels of drug use for the final analysis sample, which support the conclusion that prevention effects were the result of the intervention and not the result of differential attrition or pretest non-equivalence.

**Preventing Illicit Drug Use**

Long-term follow-up results from the large-scale prevention trial discussed above also provided evidence that the LST prevention program can reduce illicit drug use. An underlying assumption of

primary prevention efforts is that if they prevent or reduce the use of tobacco, alcohol, and/or marijuana they will have a corresponding impact on the use of other substances further along the developmental progression. In other words, preventing gateway drug use will also translate into later reductions in the use of illicit drugs such as cocaine or heroin. However, despite the fact that this rationale is commonly used to justify targeting gateway drug use, it has never been tested.

The impact of the LST program on illicit drug use was addressed by analyzing data collected from a confidential and random subsample of students involved in the long-term follow-up study described above. Data were collected by mail from 456 individuals (mean age = 18.86) who were contacted after the end of the twelfth grade. The resulting sample contained equal proportions of students from the treatment and control conditions who were equivalent at the initial pretest assessment. The length of follow-up was 6.5 years from the initial baseline. The survey assessed the use of thirteen illicit drug categories following those used by the University of Michigan *Monitoring the Future* study. Significantly lower levels of drug involvement (relative to controls) were found for the LST students on two composite measures of illicit drug use as well as for specific illicit drug categories. There were lower levels of illicit drug use using the composite measure which assessed any illicit drug use and for the measure which assessed illicit drug use other than marijuana. By individual drug category, significantly lower levels of use were found for the E1 group for LSD/other psychedelics as well as for PCP use. Significantly lower levels of heroin use were found for both the E1 and E2 condition. Finally, significant prevention effects were found for the use of inhalants for both LST groups.

**Testing the Generalizability of the Life Skills Training Approach to Minority Youth**

Several studies have been conducted to determine the impact of the LST approach on the drug use of racial/ethnic minority youth. This work is important because it examines the effectiveness of the LST approach for preventing drug use with multiethnic youth. It is also important because it addresses a gap in the drug abuse prevention field concerning a general lack of high quality research with minority populations. In developing preventive interventions for minority populations, two strategies have been followed. One strategy, based on the assumption that the etiology of drug abuse is different for different populations, involves the development of interventions designed to be population-specific. The other strategy, based on the assumption that the etiology of drug abuse is more similar than different across populations, involves the development of interventions designed to be generalizable to a broad range of individuals from different populations.

Research with the LST program has followed the second course—making modifications where warranted to maximize generalizability, cultural sensitivity, relevance, and acceptability to varied populations. Although there is only limited data concerning the etiology of drug abuse among minority populations, existing evidence suggests that there is substantial overlap in the factors promoting and maintaining drug use/abuse among different racial/ethnic groups. A second reason for pursuing this course concerns the fact that most urban schools contain individuals from multiple racial/ethnic groups. Therefore, even if there were differences across populations warranting different interventions, it would be extremely difficult to implement separate interventions for different racial/ethnic groups for both logistical and political reasons. Thus, given the choice of two or more effective interventions, it would be important to give consideration to issues of feasibility as well as effectiveness.

Although some Asians have been included in the studies conducted with the LST program, the major racial/ethnic groups involved in the most recent research studies include inner-city African

American and Hispanic/Latino youth. As was the case with previous research with White, middle-class youth, the initial focus of this research was on cigarette smoking followed by a focus on other gateway substances. Research testing the generalizability of the LST prevention approach to inner-city, African American and Hispanic/Latino youth has progressed through the following sequence: (1) exploratory/qualitative research consisting of focus group testing and key informant interviews, (2) expert review of intervention methods and materials, (3) consumer-based review of intervention materials and methods, (4) small-scale pilot studies, and (5) large-scale randomized field trials.

The process of reviewing materials (i.e., steps 1-3) was used before doing research with Hispanic/Latino youth and again prior to doing research with predominantly African American youth. In each case, the materials reviewed involved individuals from the populations the research was designed to include (i.e., Hispanic/Latino adolescents and adults for the series of studies involving Hispanic/Latino youth, and African American adolescents and adults for the series of studies involving African American youth). Because these were, in fact, inner-city youth and the LST program materials that they were reviewing were developed and used initially with suburban youth, nearly all of the comments concerned ways of making the materials more relevant to inner-city youth rather than on ethnic-specific issues. Modifications in intervention materials and methods were made, as necessary, throughout the process of development and testing. None of the modifications deriving from the etiologic literature concerning African American and Hispanic/Latino youth or the review process delineated above involved changes to the underlying prevention strategy. Rather, these changes related to the reading level of intervention materials due to the fact that these youth came from disadvantaged backgrounds, the inclusion of appropriate graphics (e.g., illustrations or pictures of inner-city youth), language, role-play scenarios, and examples appropriate to the target population. The end result of both reviews of the LST materials prior to initiating research with a particular racial/ethnic group confirmed the universal nature of the LST program and its relevance to Hispanic/Latino and African American adolescents rather than emphasizing the need to modify the program and its materials in order to make them more population-specific.

***Prevention Research with Hispanic/Latino Youth.*** The first study testing the effectiveness of the LST approach with a minority population involved predominantly Hispanic/Latino youth (Botvin, Dusenbury, Baker, James-Ortiz, & Kerner, 1989). The study included 471 seventh graders (46 percent male) attending eight public schools in the New York metropolitan area. The sample consisted of predominantly lower-income Hispanic students (74 percent), as well as a small percentage of African American (11 percent) and White (4 percent) students. Schools were randomly assigned to conditions. Significant posttest differences in cigarette smoking between the experimental and the control group were found, controlling for pretest smoking status, gender, social risk for becoming a smoker, and acculturation. Intervention effects were also found for knowledge concerning the immediate consequences of smoking, smoking prevalence, the social acceptability of smoking, decision-making, normative expectations concerning adult smoking, and normative expectations concerning peer smoking.

Data from a large-scale randomized trial (Botvin et al., 1992) also demonstrated significant program effects when implemented with predominately Hispanic/Latino urban minority students. This study involved 3,501 students from 47 public and parochial schools in the greater New York City area. Intervention materials were modified (based on the results of our pilot study and input from consultants, teachers, and students) to increase their relevance to Hispanic/Latino youth as well as to insure a high degree of cultural sensitivity. Schools were randomly assigned to experimental and control

conditions. Using *school means* as the unit of analysis, significant reductions in cigarette smoking were found for the adolescents who received the LST program when compared to controls at the end of the seventh grade. Follow-up data demonstrated the continued presence of prevention effects to the end of the tenth grade (Botvin, 1994).

***Drug Abuse Prevention with African American Youth.*** Before testing the LST approach on African American youth, the intervention materials and methods were once again subjected to an extensive review to determine their cultural appropriateness for this population. Following this, a small-scale study was conducted with nine urban junior high schools in northern New Jersey (Botvin et al., 1989). The pretest involved 608 seventh grade students. Of these, 221 were in the treatment group and 387 in the control group. The sample was 87 percent African American, 10 percent Hispanic/Latino, 1 percent White, and 2 percent other. Schools were randomly assigned to treatment and control conditions within each of the three participating communities. Students in the treatment schools received the LST program; students in the control schools received the smoking education curriculum normally provided by their school. Throughout the prevention program, classroom observation data and teacher feedback were collected.

A series of multivariate statistical analyses were computed to assess the impact of this intervention approach on cigarette smoking. Pretest scores, age, grades, and social risk for smoking (the smoking status of friends) were used as covariates. Results indicated that there were significantly fewer posttest smokers in the treatment group than in the control group based on smoking status in the past month. Significant treatment effects were also found for knowledge of smoking consequences, normative expectations regarding adult smoking prevalence, and normative expectations regarding peer smoking prevalence.

A large-scale prevention trial involving predominantly African American youth from 46 inner-city schools in northern New Jersey provided additional empirical support for the effectiveness of this prevention approach with this population (Botvin & Cardwell, 1992). Schools were randomly assigned to treatment ($n$ = 21) and control ($n$ = 25) conditions after first blocking on school-wide smoking rates. Students ($n$ = 2,512) were pretested in the spring of 1990 while they were in the seventh grade, posttested in the early winter of 1991 and posttested again in the spring of 1991 at the end of the eighth grade. In the treatment condition, all eligible classes in participating schools received the LST intervention; in the control group all classes received the health (smoking) education normally provided to its students. The analysis sample of 1,748 students was 97 percent minority and 3 percent White; of the total sample, 78 percent were African American, 13 percent were Hispanic/Latino, 1 percent were Native American, 1 percent were Asian, and 3 percent classified themselves as "other." Initial posttest results showed significantly less smoking for students in the treatment group who received the intervention in the seventh grade and booster sessions in the fall of the eighth grade when compared with both the non-booster treatment group and the controls. At the final follow-up, students who received booster sessions and the original intervention had significantly lower rates of smoking than the controls.

### Summary of Findings

Studies testing the effectiveness of the LST approach have demonstrated prevention effects with respect to tobacco, alcohol, and marijuana use as well as on hypothesized mediating variables. The magnitude of these effects have been large, with most studies demonstrating initial reductions of 50 percent or more when students who received the LST program were compared to those who did not.

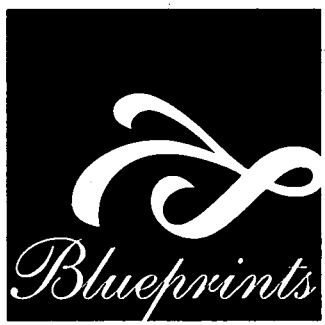
Research with LST includes studies testing its short-term effectiveness as well as long-term durability, studies testing different delivery methods and the effectiveness of booster sessions, studies testing its effectiveness when conducted by different program providers, and studies testing its effectiveness with different populations. These studies have ranged from small-scale pilot studies to large-scale multisite randomized field trials. Continued research is underway to understand LST's effectiveness with multiethnic populations and to determine its applicability to other problems facing our youth, such as violence.

## Table 2. Evaluation Outcomes

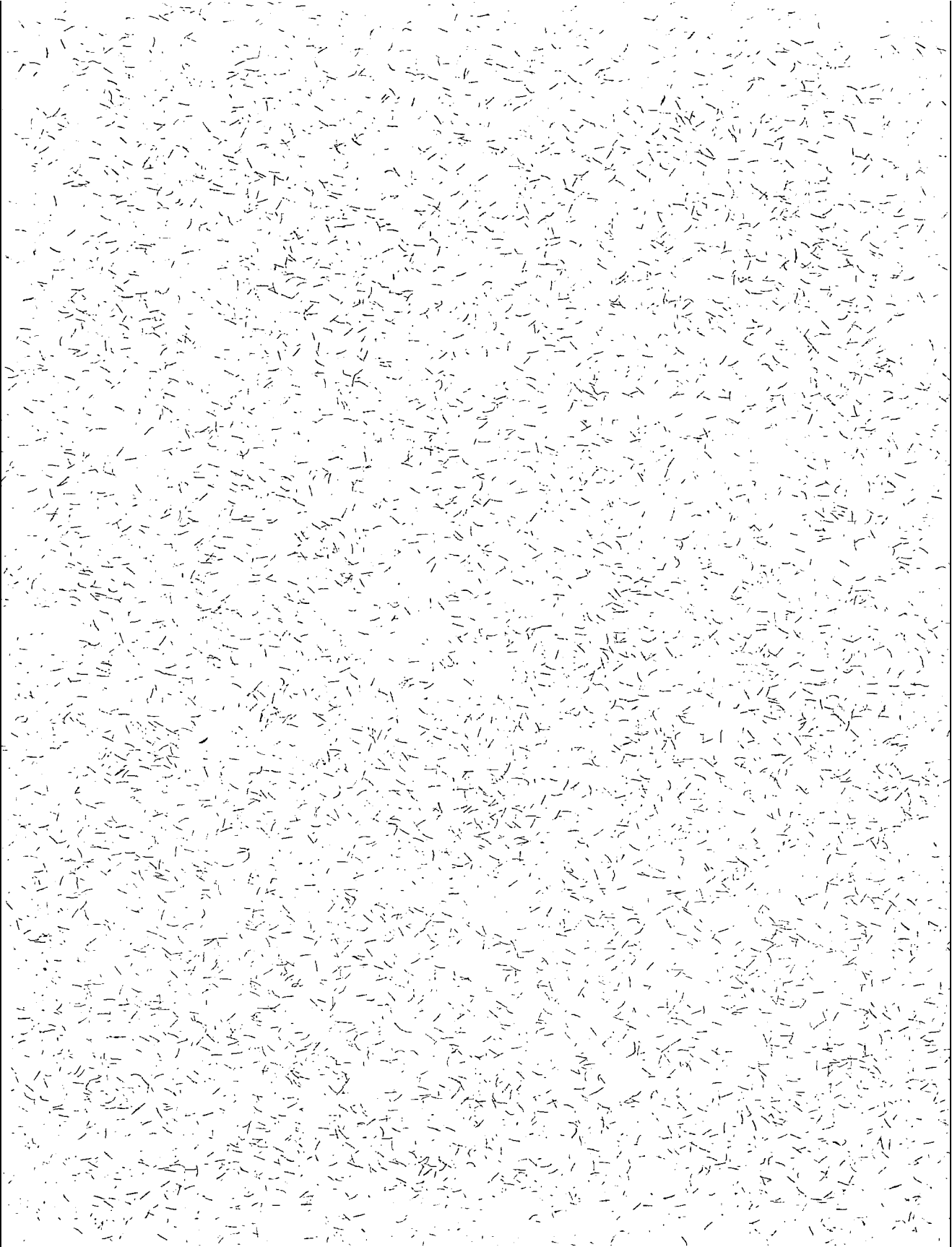
| Location | n | Comparison/ Control Group | Assignment Procedure | Pre- to Post-Test Period | Follow-up Period | Risk/ Protective Factors | Outcome | Reference |
|---|---|---|---|---|---|---|---|---|
| Suburban New York | 281 (2 Sch) | 2 groups (121 LST Smoking Prevention Program; 160 Control) | Random, by school | 12-weeks | 3-months | Smoking Knowledge<br>Social Anxiety<br>Need for Acceptance | Reductions of 75% in new smokers at posttest; reductions of 67% in new smokers at 3 month follow-up | Botvin, Eng, & Williams, 1980 |
| Suburban New York | 426 (2 Sch) | 2 groups (LST Smoking Prevention Program; Control) | Random, by school | 3-months | 1-year | Smoking, Psychosocial, & Advertising Knowledge<br>Social Anxiety<br>Influenceability | Reductions of 56% in weekly smokers; reductions of 58% in new smokers;<br>Findings indicate the program's effectiveness when implemented with older peer leaders (11th & 12th graders) | Botvin & Eng, 1982 |
| Suburban New York | 902 (7 Sch) | 4 conditions (LST Smoking Prevention Program scheduled weekly; LST mini course; LST with 1-year follow-up booster program; Treatment as usual control) | Random, by school | 4-months | 1-year | Smoking & Psychosocial Knowledge<br>Assertiveness<br>Social Anxiety<br>Self-Confidence<br>Self-Satisfaction<br>Smoking & General Influenceability<br>Smoking Attitudes<br>Locus of Control | Reductions of 50% in new smokers; reductions of 87% in weekly smokers;<br>LST effective when implemented weekly or when implemented as a mini-course;<br>LST with booster in subsequent year enhances prevention effects | Botvin, Renick, & Baker, 1983 |
| New York City | 239 (2 Sch) | 2 groups (1 school LST, 1 school Control) | Random, by school | 3-months | 6-months | none reported | Reductions of 54% in drinkers; reductions of 73% in heavy drinkers; 79% fewer getting drunk | Botvin, Baker, Botvin, Filazzola, & Millman, 1984 |
| Suburban New York | 1,311 (10 Sch) | 3 groups (LST implemented by older students, LST implemented by teachers, Control) | Random, by school | 4-months | --------- | Smoking, Drinking, & Marijuana Knowledge<br>Smoking, Drinking, & Marijuana Attitudes<br>Social Anxiety<br>Locus of Control<br>Smoking Influenceability | Reductions of 50%-83% in smokers, drinkers, heavy drinkers, problem drinkers, marijuana users | Botvin, Baker, Renick, Filazzola, & Botvin, 1984 |

| Location | n | Comparison/ Control Group | Assignment Procedure | Pre- to Post-Test Period | Follow-up Period | Risk/ Protective Factors | Outcome | Reference |
|---|---|---|---|---|---|---|---|---|
| Suburban New York<br><br>(Follow-up of study above) | 998 (10 Sch) | 5 groups (LST implemented by older students w/ boosters and w/o; LST implemented by teachers w/ boosters and w/o, Control) | Random, by school | ---------- | 1-year | Drinking & Marijuana Knowledge<br><br>Smoking, Drinking, & Marijuana Attitudes | Peer-led implementation with booster sessions resulted in reductions in tobacco, alcohol, and marijuana use; similar effects for females in teacher-led condition; program effects on mediating variables | Botvin, Baker, Filazzola, & Botvin, 1990<br><br>Note: Reports follow-up data from Botvin et al., 1984 study |
| Suburban New York | 4,466 (56 Sch) | 3 groups (18 schools LST w/ 1-day teacher training and implementation feedback; 16 schools LST w/ videotaped teacher training; 22 no treatment Control) | Random, by school | 3-months | 3-years | Normative Expectations<br><br>Drug Knowledge<br><br>Interpersonal Skills<br><br>Communication Skills | Reductions in cigarette, marijuana, and alcohol use; program effects on mediating variables such as normative expectations, substance use knowledge, interpersonal and communication skills | Botvin, Baker, Dusenbury, Tortu, & Botvin, 1990 |
| Suburban New York<br><br>(longer term follow-up of study above) | 3,597 (56 Sch) | 3 groups (18 schools LST w/1-day teacher training and implementation feedback; 16 schools LST w/ videotaped teacher training; 22 no treatment control schools | Random, by school | 3-months | 6-years | | Reductions in drug and polydrug use; strongest effects found for students who received a more complete version of the program | Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995<br><br>Note: Reports follow-up data from Botvin, Baker, Dusenbury et al., 1990 study |
| New York City | 3,153 (47 Sch) | 2 groups (1,795 LST; 1,358 Control) | Random by school | 4-months | 3-years | Normative Expectations & Knowledge | Significantly fewer smokers after intervention and booster sessions | Botvin et al., 1992; Botvin, 1994 |
| New Jersey | 608 (9 Sch) | 2 groups (221 LST; 387 Treatment-as-usual Control) | Random, by school | 3-months | ---------- | Normative Expectations<br><br>Smoking Knowledge | Reductions in tobacco use; increased knowledge of consequences of smoking and normative expectations concerning adult and peer smoking | Botvin, et al., 1989 |
| New Jersey | 1,748 (46 Sch) | 2 groups (844 LST w/ 1 year of booster ; 904 Control) | Random by school | 3-months | 1- and 2-year | | Significantly fewer smokers after intervention and booster sessions | Botvin & Cardwell, 1992 |

| Location | n | Comparison/ Control Group | Assignment Procedure | Pre- to Post-Test Period | Follow-up Period | Risk/ Protective Factors | Outcome | Reference |
|---|---|---|---|---|---|---|---|---|
| New York City | 639 (6 Sch) | 3 groups (generic LST curriculum; culturally focused LST curriculum; information-only control) | Schools matched according to demo-graphic variables | 3-months | --------- | Anti-drinking Attitudes<br>Risk Taking | Both prevention programs show reductions in intentions to drink alcohol, and changes in mediating variables consistent with non-drug use; generic program also reduced intentions to use illicit drugs | Botvin et al., 1994 |
| New York<br>(Sub-sample of study above) | 456 (6 Sch) | Same three groups as above | Same as above | 3-months | 2-years | Anti-drinking Attitudes<br>Refusal/Assertiveness Skills<br>Risk Taking | Reductions in current alcohol use, and intentions to drink alcohol. Effects on mediating variables consistent with non-drug use | Botvin, Schinke, Epstein, Diaz, & Botvin, 1995 |




# CHAPTER FOUR
## Program Replication



# PROGRAM REPLICATION

## Description of Program Replications

There have been two kinds of replications of the ***Life Skills Training*** program over the 17 years since it was originally conceptualized, tested, and the first publication appeared in Preventive Medicine. The first kind of replication was conducted within the context of our research agenda. These were replications and extensions of the original work. They occurred in a progressive and systematic fashion in order to test the efficacy of this prevention approach with respect to different program formats, types of program providers, additional years of intervention in the form of booster sessions, its generalizability from cigarette smoking to other problem behaviors, its generalizability from White middle-class youth to inner-city minority youth, long-term effectiveness, and different levels of provider training and support. This is the easiest type of replication to document since the results of these "replication and extension" efforts have been published in scientific journals and described in numerous book chapters.

The second type of replication concerns that which has occurred outside of the context of our research efforts as the program has been gradually adopted by schools concerned about preventing tobacco, alcohol, and illicit drug use. Although a small number of schools have implemented the LST program over the years, dissemination and adoption of the program has only recently begun in an organized and systematic manner. Whatever adoptions have occurred over the past seventeen years have not been documented. Some information is, however, available for more recent adoptions by schools in the past year or so. Still, no systematic effort has been made to collect that information. Thus, the only reliable information available concerning "replications" relates to the formal evaluation studies conducted with the LST program. It will be from that perspective that information will be provided in the sections below.

### *Changes and Modifications in Program*

#### Class Size

All of the studies with the LST program were conducted in school classrooms. Thus, the general setting has remained essentially the same despite obvious differences from classroom to classroom, school to school, or teacher to teacher. Large classrooms require some minor adjustments in order to implement the prevention program. For example, as the size of the class increases it is necessary to modify the ground rules and class activities in the interest of order and time. One ground rule change necessitated by a larger class is to require students to raise their hands before speaking and wait for the teacher to call upon them. With smaller classes, students can be permitted to speak up when participating in group discussion activities. A common activity change is to abbreviate skills practice exercises in larger classes so that as many students as possible are able to participate.

Another change is to divide the class into smaller groups (usually five or six students each) so that skills training exercises can be conducted within these groups.

#### Modifications for Minority Youth

The original research with this prevention program was conducted with White, middle-class youth in suburban schools. Some modifications were necessary when the prevention program was implemented with inner-city minority youth. These modifications were made specifically in response to

feedback received from focus group testing and key informant interviews involving African American and Hispanic/Latino adolescents and adults prior to testing the LST approach with inner-city African American and Hispanic/Latino youth. Although relatively minor, they are worth noting nonetheless. These modifications did not affect the underlying prevention strategy in any way; rather, they related to the reading level, the examples and illustrations used in the program, and the skills training scenarios. Many of the changes to the materials for the studies with inner-city youth were integrated into the published version of the LST materials in order to increase its appeal to a diverse range of adolescents (e.g., using more universal examples and role play scenarios, including illustrations and images of adolescents that reflect the racial/ethnic diversity of America). Each of these will be discussed briefly. There is only one published version of the LST curriculum.

***Reading Level.*** During our pilot work with inner-city youth it became apparent that the reading level of the student workbook and/or handouts was inappropriate and needed to be modified. A reading consultant was hired to review our materials, and they were also reviewed by teachers and students within the context of focus groups. Following this review of the reading level of student materials, the requisite revisions were made to adjust the reading level downward. The reading level of the current published curriculum is similar to that used earlier with suburban and rural youth, rather than the materials used in studies with inner-city youth.

***Examples.*** Modifications were also made in the examples used in class discussion and class activities. These modifications were made in order to increase the relevance and appropriateness of the program material for inner-city minority youth. Instead of using examples common to life in suburbia, the examples were changed to reflect life in the inner-city.

***Skills Practice Scenarios.*** Once again modifications in the prevention program were made to render the program materials relevant and appropriate to inner-city minority youth. Skills training scenarios were changed to reflect the setting and circumstances of inner-city life. For example, skills training scenarios involving shopping malls were changed to hanging out in front of a store in the city. To the extent feasible even the names of stores were changed from those common to the suburbs to those common to the inner-city. Instead of practicing assertive skills or drug resistance skills at a party in someone' house, the scenario was changed to a situation warranting an assertive response or drug refusal at a party in someone's apartment.

***Training.*** Over the course of the studies with this prevention program, modifications have also been made to the provider training. The purpose of these modifications was to increase the skills and confidence of program providers to implement the prevention program with sufficient emphasis on skills training. This required increasing the standard training workshop from one day to two days, stressing the importance of skills training exercises, and restructuring the training workshop to provide time for the demonstration and practice of skills training activities.

***Length.*** The original model of the prevention program contained ten class periods. Then, the program length was increased to twelve class periods when a unit was added concerning the immediate effects of cigarette smoking on the body using biofeedback apparatus. An additional unit was also added to permit more time for practicing drug resistance skills training exercises. Next, when the prevention program was broadened to include material on alcohol and marijuana, the length of the program was increased to fifteen class periods which remains the length of the program in its current form.

### *Implementation Problems and How They Were Addressed*

The most significant implementation problem occurring in the various replications with the prevention program involves partial or incomplete implementation. Closely related to this is implementing the prevention program in a manner that deviates from the intervention protocol and modifications to the program. School district support as well as continuity and commitment at the management level are also important ingredients in successful implementation of this type of prevention program. Finally, peer led programs have many of the same potential problems as those implemented by teachers. In addition, peer leaders require considerable energy and organization to develop and maintain them over time.

Most of these issues can be addressed through provider selection and training. To the extent possible, only providers who volunteer to teach the prevention program, are committed and motivated to teach this type of prevention program, have relevant prior training and experience, and who are willing to follow the protocol for this prevention program delineated in the teacher's manual should be selected to teach this program. The other means of decreasing implementation problems is through proper training. The provider training workshop was modified to increase providers' motivation for teaching this program by creating a sense of optimism, enthusiasm, excitement, and confidence that, if properly implemented, it can significantly reduce drug use among their students throughout the workshop; the importance of implementation fidelity is stressed. Evidence of the effectiveness of the prevention program is presented as well as evidence that modifying the program or implementing it only partially decreases its effectiveness. Opportunities are provided during the workshop to identify potential implementation problems and brainstorm solutions.

### *Program Outcomes*

As we indicated in the sections above, there have been twelve major evaluation studies testing the effectiveness of the LST program. The initial evaluation studies tested the effectiveness of the prevention program with cigarette smoking. Later studies tested its effectiveness with other substances (alcohol and marijuana) and with other populations. These studies have examined both the short-term and long-term effectiveness of this prevention program.

***Evaluation Design.*** All of the studies evaluating this prevention program have used control groups. Nearly all of these have used random assignment to treatment and control conditions, with schools being used as the unit of assignment. In the smallest studies, only one or two schools were assigned to each condition; however, in the larger randomized prevention trials, between 10 and 20 schools were assigned to each condition. The sample sizes have ranged from a few hundred students in the smaller studies to nearly 6,000 students in the larger studies. In the most rigorous studies, participating schools were first stratified by drug use prevalence rates (typically high, medium, and low) and then randomized to conditions in order to increase pretest comparability of conditions and facilitate meaningful inferences from the analysis of outcome data. Prior to conducting analyses of outcome measures, treatment and control conditions were compared to document their pretest equivalence. Moreover, in order to increase the precision of outcome analyses, pretest scores were used as covariates in all recent studies along with other appropriate covariates. Students were pretested and posttested using questionnaires administered to groups of students in class by members of the Cornell project staff. Follow-up data were typically collected annually. Follow-up intervals have ranged from three months after the initial posttest to over five years. In order to maximize sample retention rates, the

primary in-class data collections have been augmented with up to three absentee data collections to collect data on those individuals who were not present on the day data were collected from the other students in their class. In some instances, this has been further augmented with mailed surveys and telephone interviews.

***Outcome Measures.*** All of the studies testing the effectiveness of the LST program have utilized an extensive battery of items in order to rigorously evaluate the impact of the program. These have included measures of knowledge, attitudes, norms, psychological characteristics, skills, behavioral intentions, and drug use behavior. Self-report data have been carefully collected using methods known to maximize truthful reporting. In addition, saliva samples and/or carbon monoxide (CO) samples have also been collected. These samples have been used as separate measures of program effectiveness in some studies where group means have been compared or they have been used to provide a gauge of the veracity of self-reports by examining correlations between these objective measures and self-report data. Tobacco, alcohol, and marijuana use have been assessed using dichotomous as well as continuous variables. Measures have been included to assess the frequency and quantity of use. Data have been analyzed using either non-parametric statistical methods where warranted (usually in the small-scale pilot studies) or parametric methods.

***Summary of Short- and Long-Term Effects.*** The studies conducted with the LST program have produced initial reductions in tobacco, alcohol, and/or marijuana use of 40 percent to 80 percent, with most findings showing relative reductions in drug use of 50 percent to 75 percent. Longer-term results show that without ongoing intervention or booster sessions, initial reductions in drug use tends to erode after about a year. However, including booster sessions not only maintain initial reductions in drug use but can also increase prevention effects. Data from our longest follow-up study shows the prevention program can reduce drug use by up to 44 percent over a six-year period and can reduce multiple drug use by up to 66 percent. The strongest prevention effects have been found for those students receiving an implementation of the prevention program that is high in fidelity. Prevention effects have also been found for measures assessing knowledge, attitudes, norms, skills, behavioral intentions, and selected psychological factors in a direction consistent with decreased drug use risk.

## Issues Related to the Transferability of Program to Other Settings and Populations

Most of the issues related to other school settings and populations have been addressed and discussed in the sections above. Our own past experience indicates that minor modifications may be necessary to adapt to somewhat different environments and implementation settings.

### Scheduling/Programming

One of the most common issues concerns the *identification and selection of a program "slot"* in the schedule of schools interested in implementing this prevention program. While health education and drug education are natural slots for implementing this type of prevention program, school administrators and participating teachers need to discuss available options for scheduling and implementing the prevention program. The LST program has been implemented through any major subject area (such as science or social studies) as well as through health or drug education. Schools must determine the most logical slot for their students.

### Physical Features of the Environment

Other important factors concern the physical dimensions of the environment such as class size and the location for implementing the prevention program. To the extent possible, class size should be kept small or at least limited to a single class; combining two or more classes together (as occurs for physical education in many schools) can lead to classroom management problems and result in less than optimal implementation conditions. Similarly, the prevention program should be implemented in a classroom rather than an auditorium, gym, or cafeteria.

### Different Populations

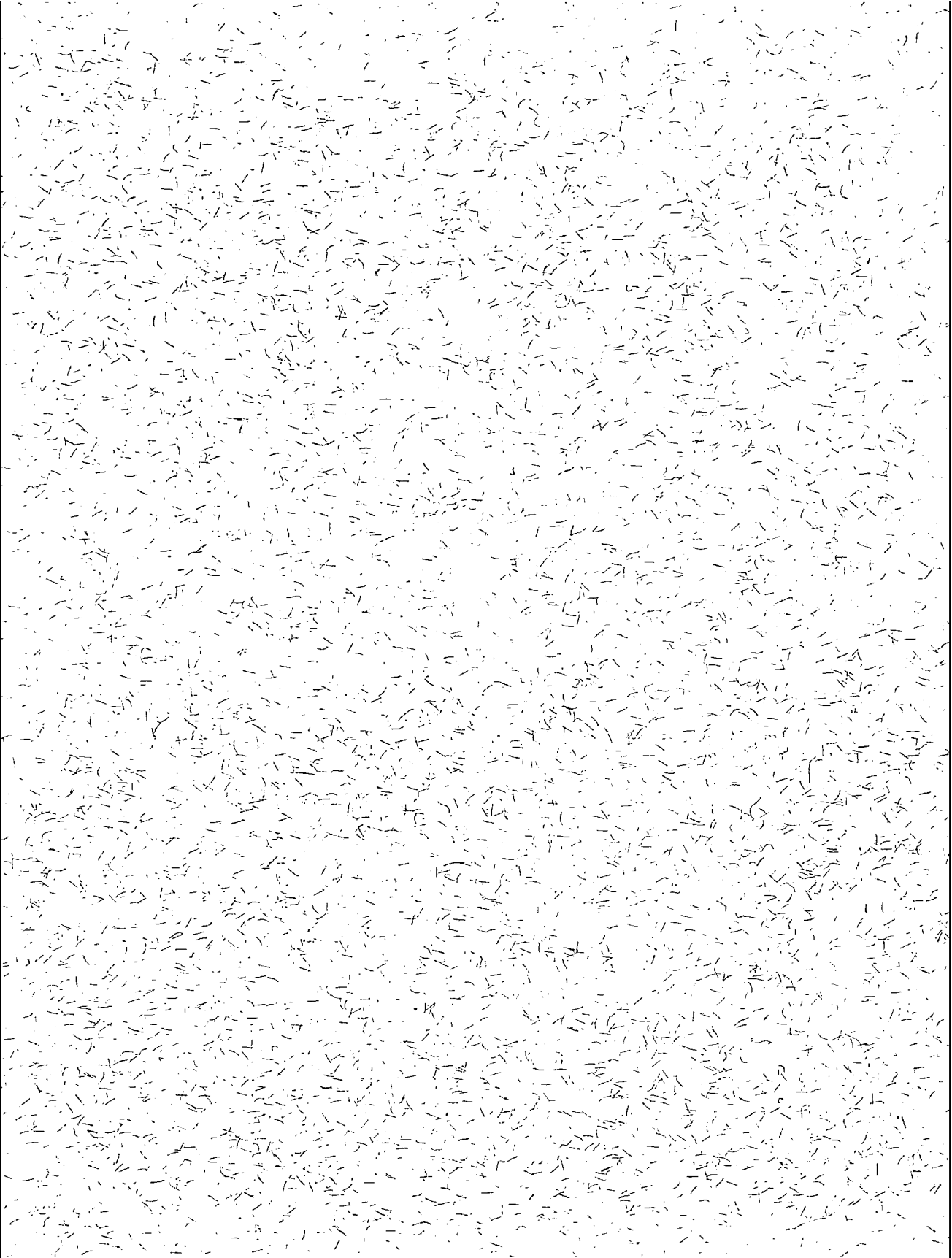
The LST program has been implemented with several different populations over the years. These include White urban, suburban, and rural populations as well as racial/ethnic minority populations (African American, Hispanic, and Asian American). The prevention program has been found to be appropriate for several different populations. However, as always, it is important when implementing any program with a different population to make certain that it is *culturally sensitive* and takes into account the learning style of the population. Prior research with the LST program has shown that the skills training methods used in the program work well with a variety of populations. It is important to modify the *language*, *examples*, and *behavioral rehearsal scenarios* used when implementing the program so that any new population participating in the prevention program will identify with the material contained in the program and view it as being relevant to their own lives.

## Practical Suggestions for Starting a New Replication

New replications of the LST program are relatively easy since the program has been put into the form of a formal curriculum including a teacher's manual and student guide for each of the three grade levels of middle/junior high school. The teacher's manual provides essential information concerning the background and rationale for this program and summarizes the evaluation data supporting its effectiveness. It provides detailed step-by-step information for implementing the prevention program. This standardized format has been designed to be user-friendly, with the material bound in a three-ring binder with color-coded sessions tabs. Program material is carefully laid out with important points identified with icons and skills delineated in boxes highlighting the specific steps needed for a competent execution of each skill.

It is recommended that individuals interested in implementing the LST program in their school contact Princeton Health Press to obtain information concerning how to order the curriculum materials and arrange for provider training. Provider training workshops consist of a two-day structured opportunity to become familiar with the LST approach and practice conducting essential program exercises and skills training activities. It is also advisable that individuals interested in this prevention program obtain copies of the evaluation evidence supporting its effectiveness, speak with individuals from other schools who have implemented the program, and consult with project staff at Cornell concerning any potential logistical or implementation problems (a list of possible contacts is available upon request). Key issues to be addressed early in the planning process include who the program providers will be, how they will be selected, and how/where the prevention program will be programmed into the existing school schedule. As with any new program, support needs to be developed among the individuals selected to implement the program, administrators, and parents. Because of the extensive evaluation history of this prevention program and the concern most communities have for the problem of drug abuse, it should be easy to develop a high level of support and commitment for LST in any community.


**Appendices**



# APPENDIX A

## References by Document Section

Full citations are located at the end of the document.

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# APPENDIX B

## Table of Contents

# APPENDIX C

## Session Goals and Objectives

**Self-Image and Self-Improvement**

| | |
|---|---|
| SESSION GOAL | To teach students what self-image is, how it is formed, how it relates to behavior, and how it may be improved. |
| MAJOR OBJECTIVES | ⟿ Define "self-image."<br>⟿ Discuss how self-image is formed.<br>⟿ Identify ways to increase self-image.<br>⟿ Identify something that makes you proud. |
| MATERIALS NEEDED | ⟿ **Student Guide** |
| SPECIAL PREPARATION | None |
| VOCABULARY | ⟿ Self-Image<br>⟿ Attitude<br>⟿ Beliefs |
| HOMEWORK | **Student Guide** — *Everyday Decisions, Worksheet 4* (page 16) |

## Session Goals and Objectives

### Decision Making

| | |
|---|---|
| SESSION GOAL | To teach students how to make decisions and solve problems on their own. |
| MAJOR OBJECTIVES | ➳ Demonstrate how decisions are influenced by group pressures.<br>➳ Discuss reasons why people are influenced by group members.<br>➳ Identify everyday decisions.<br>➳ Describe how important decisions are made.<br>➳ Identify a process for making decisions. |
| MATERIALS NEEDED | ➳ **Student Guide**<br>➳ Volunteers to participate in the group pressure experiment |
| SPECIAL PREPARATION | Have students prepared to review their homework assignment on *Everyday Decisions*. |
| VOCABULARY | ➳ Decision<br>➳ Influence<br>➳ Pressure<br>➳ Persuasive tactics |
| HOMEWORK | **Student Guide** — *My Reasons for Not Smoking, Worksheet 8* (page 26) |

## Session Goals and Objectives

**Smoking: Myths and Realities**

| | |
|---|---|
| SESSION GOAL | To teach students information about cigarette smoking and other forms of tobacco use to counter common myths and misconceptions. |
| MAJOR OBJECTIVES | ⊰ Identify that the majority of teenagers and adults are not cigarette smokers.<br>⊰ Discuss reasons young people have for smoking or not smoking.<br>⊰ Discuss realities of what cigarettes can and cannot do.<br>⊰ Discuss the immediate and long-term effects of cigarette smoking.<br>⊰ Describe the process of becoming a smoker.<br>⊰ Identify that smoking is becoming less socially acceptable.<br>⊰ Discuss non-smokers' rights. |
| MATERIALS NEEDED | ⊰ **Student Guide** |
| SPECIAL PREPARATION | None |
| VOCABULARY | ⊰ Minority<br>⊰ Estimates<br>⊰ Long-range<br>⊰ Risk Factor<br>⊰ Addiction<br>⊰ Socially acceptable<br>⊰ Sidestream smoke |
| HOMEWORK | **Student Guide** — *Home Smoking Experiment* (page 31) |

## Session Goals and Objectives

**Smoking and Biofeedback**

| | |
|---|---|
| SESSION GOAL | To teach students some of the immediate physiological effects of smoking. |
| MAJOR OBJECTIVES | ⟿ Describe the effects of elevated heart rates on the body.<br>⟿ Identify situations that can change heart rates.<br>⟿ Discuss the purpose and procedure of the pulsemeter.<br>⟿ Discuss the purpose and procedure of the tremor test.<br>⟿ Discuss the reasons for the difference in pulse rates before and after smoking a cigarette.<br>⟿ Discuss the reasons for the difference in hand steadiness before and after smoking a cigarette. |
| MATERIALS NEEDED | ⟿ **Student Guide**<br>⟿ Pulsemeter<br>⟿ Tremor test equipment |
| SPECIAL PREPARATION | Make sure the biofeedback equipment is connected and working properly prior to the class session.<br><br>If possible, recruit an adult smoker who works in the school (janitor, office worker, teacher) to participate in biofeedback activities. |
| VOCABULARY | ⟿ Biofeedback<br>⟿ Carbon monoxide<br>⟿ Nicotine<br>⟿ Pulse<br>⟿ Anxiety |
| HOMEWORK | Student Guide — *Smoking Word Puzzle* (page 33), *My Reasons for Not Drinking, Worksheet 9* (page 39) |
| SPECIAL NOTE | The class experiments contained in this session involve having a smoker smoke in the classroom. If this is not possible focus the class discussion on the **Student Guide** material and the *Home Smoking Experiment* (page 31). |

## Session Goals and Objectives

**Alcohol: Myths and Realities**

| | |
|---|---|
| SESSION GOAL | To teach students information about alcohol to counter common myths and misconceptions. |
| MAJOR OBJECTIVES | ➳ Recognize that alcohol is a drug which slows down the functioning of the brain and nervous system.<br>➳ Recognize that while many people drink, most adults drink only occasionally and in moderation.<br>➳ Discuss reasons why people do or do not drink.<br>➳ Identify the realities of what alcohol can and cannot do. |
| MATERIALS NEEDED | **Student Guide** |
| VOCABULARY | ➳ Abstinence<br>➳ Misconception<br>➳ Tolerance |
| HOMEWORK | **Student Guide** — *My Reasons for Not Smoking Marijuana, Worksheet 10* (page 43) |

## Session Goals and Objectives

**Marijuana: Myths and Realities**

| | |
|---|---|
| SESSION GOAL | To teach students information about marijuana to counter common myths and misconceptions. |
| MAJOR OBJECTIVES | ⊰ Describe what marijuana is.<br>⊰ Identify that the vast majority of teenagers and adults do not smoke marijuana.<br>⊰ Discuss the reasons why some teenagers use marijuana.<br>⊰ Discuss the realities of what marijuana can and cannot do.<br>⊰ Discuss the immediate and long-term effects of marijuana on the body.<br>⊰ Discuss the legal status of marijuana. |
| MATERIALS NEEDED | **Student Guide** |
| SPECIAL PREPARATION | None |
| VOCABULARY | ⊰ Marijuana<br>⊰ Euphoria<br>⊰ Illicit<br>⊰ Decriminalization<br>⊰ Legalization<br>⊰ Psychoactive<br>⊰ THC (delta-9-tetrahydrocannabinol) |
| HOMEWORK | **Student Guide** — *Identifying Ad Techniques*<br><br>Clip out a tobacco or alcohol product being advertised to bring into class and fill out Worksheet 11 (page 48) and Worksheet 12 (page 49). |

## Session Goals and Objectives

**Advertising**

| | |
|---|---|
| SESSION GOAL | To increase students' awareness of the techniques employed by advertisers to manipulate consumer behavior and to teach students how to resist these techniques. |
| MAJOR OBJECTIVES | ⊰ Discuss the purpose of advertising.<br>⊰ Identify common advertising techniques.<br>⊰ Identify and analyze cigarette and alcohol advertisements.<br>⊰ Discuss alternative ways of responding to cigarette and alcohol ads. |
| MATERIALS NEEDED | ⊰ **Student Guide**<br>⊰ Sample advertisements including 3 different brands of cigarettes and alcoholic beverages. |
| SPECIAL PREPARATION | Be sure to bring in some of your own ads. Clip out ads that show a variety of different products and different methods to influence consumers to purchase their products (i.e., sex appeal, testimonials, youth appeal, etc.). |
| VOCABULARY | ⊰ Consumer<br>⊰ Manipulation<br>⊰ Deceptive |
| HOMEWORK | **Student Guide** — *Dealing with Anxiety, Worksheet 13* (page 52) |

## Session Goals and Objectives

**Coping with Anxiety**

| | |
|---|---|
| SESSION GOAL | To teach students what anxiety is, common situations which cause it, and techniques for coping with anxiety. |
| MAJOR OBJECTIVES | ⟿ Define "anxiety."<br>⟿ Identify physical "symptoms" of nervousness.<br>⟿ Discuss common situations which produce nervousness.<br>⟿ Discuss alternative ways of dealing with anxiety-inducing situations.<br>⟿ Demonstrate the techniques for coping with anxiety (relaxation exercise, mental rehearsal, deep breathing). |
| MATERIALS NEEDED | ⟿ **Student Guide**<br>⟿ Audio Cassette Player and Relaxation Tape |
| SPECIAL PREPARATION | Review the introductory motivation exercise and choose one of the examples listed to introduce the lesson. |
| VOCABULARY | ⟿ Anxious<br>⟿ Coping<br>⟿ Relaxation |
| HOMEWORK | **Student Guide** — *Looking at a Recent Misunderstanding, Worksheet 15* (page 57) |

## Session Goals and Objectives

**Communication Skills**

| | |
|---|---|
| SESSION GOAL | To teach students how to communicate effectively. |
| MAJOR OBJECTIVES | ⊰ Define "communication."<br>⊰ Discuss verbal and nonverbal communication.<br>⊰ Define misunderstanding.<br>⊰ Discuss how misunderstandings develop.<br>⊰ Discuss how misunderstandings can be avoided. |
| MATERIALS NEEDED | ⊰ **Student Guide**<br>⊰ Slips of paper (or index cards) with various emotions written on them for illustrating verbal and nonverbal behavior<br>⊰ Telephone (optional) |
| SPECIAL PREPARATION | ⊰ Have students prepared to review their homework assignment.<br>⊰ Prepare slips of paper for verbal and nonverbal exercise.<br>⊰ Choose a student to lead communication activity.<br>⊰ Magazines available for picture cutting. |
| VOCABULARY | ⊰ Communication<br>⊰ Nonverbal<br>⊰ Paraphrase<br>⊰ Contradictory<br>⊰ Message<br>⊰ Response<br>⊰ Ambiguous<br>⊰ Misunderstanding<br>⊰ Verbal<br>⊰ Effective<br>⊰ Interpersonal |
| HOMEWORK | **Student Guide** — *Developing Social Skills Scripts* (page 66) |

## Session Goals and Objectives

**Social Skills (A)**

| | |
|---|---|
| SESSION GOAL | To teach students basic social skills in order to develop successful interpersonal relationships. |
| MAJOR OBJECTIVES | ⟿ Recognize that many people feel shy or uncomfortable in social situations.<br>⟿ Discuss how shyness can be overcome.<br>⟿ Practice making social contacts.<br>⟿ Practice giving and receiving compliments.<br>⟿ Practice initiating, sustaining, and ending conversations. |
| MATERIALS NEEDED | ⟿ **Student Guide**<br>⟿ Tennis balls (2 or 3) |
| SPECIAL PREPARATION | None |
| VOCABULARY | ⟿ Self-confident<br>⟿ Specific<br>⟿ Initiating<br>⟿ Sustain<br>⟿ Compliment |
| HOMEWORK | **Student Guide** — Review *Getting Over Being Shy* and fill out Worksheet 18 (page 67), *Social Activities With The Opposite Sex* |

## Session Goals and Objectives

**Social Skills (B)**

| | |
|---|---|
| SESSION GOAL | To teach students basic social skills pertaining to close personal relationships, interactions with the opposite sex, and planning social activities. |
| MAJOR OBJECTIVES | ⟡ Discuss what attributes attract individuals to one another.<br>⟡ Discuss the significance of physical appearance in relationships.<br>⟡ Apply general social skills to interactions with the opposite sex.<br>⟡ Identify new and different social activities.<br>⟡ Discuss ways to approach others with ideas for social activities.<br>⟡ Discuss ways of responding when asked out. |
| MATERIALS NEEDED | ⟡ **Student Guide**<br>⟡ Telephones |
| SPECIAL PREPARATION | Students should be prepared to review their homework assignments. |
| VOCABULARY | ⟡ Attributes<br>⟡ Interaction |
| HOMEWORK | **Student Guide** — *Handling Difficult Situations, Worksheet 9* (page 70) |

## Session Goals and Objectives

**Assertiveness**

| | |
|---|---|
| SESSION GOAL | To teach students how to become more assertive and resist peer pressure to use drugs. |
| MAJOR OBJECTIVES | ➢ Identify common situations where people often fail to be assertive.<br>➢ Identify persuasive tactics.<br>➢ Identify and practice verbal assertive skills.<br>➢ Identify and practice nonverbal assertive skills.<br>➢ Discuss alternate ways for dealing with situations where teenagers are pressured to smoke, drink, or use marijuana. |
| MATERIALS NEEDED | **Student Guide** |
| SPECIAL PREPARATION | The teacher should be prepared to demonstrate the verbal and nonverbal assertive skills covered in this session. |
| VOCABULARY | ➢ Aggressive<br>➢ Assertive<br>➢ Passive<br>➢ Self-esteem |

# APPENDIX D

## Process Evaluation Forms

## Life Skills Training Completion Form
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Advertising**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Discuss the purpose of advertising. | | | |
| P. The purpose of advertising is to sell products. | | | |
| P. Many advertisers exaggerate their claims of their products to sell them. | | | |
| O. Identify these different forms of advertising. | | 1. Advertising Media | |
| P. There are different forms of advertising. | | | |
| O. Identify persuasive tactics. | | | |
| O. Identify common advertising techniques. | | 2. Advertising Techniques - Student Handout: *Buy Me! Buy Me!* (Student Handout) | |
| P. Advertisers are often so effective in manipulating us that we are unaware of it. | | | |
| O. Identify ways of resisting persuasive tactics. | | | |
| P. Ask yourself: Why is the person trying to persuade you? What will you get out of it? | | | |
| P. Ask yourself: Is what the other person wants consistent with what you want? | | | |
| P. Ask yourself: How true is what the ad presents? | | | |
| O. Identify and analyze cigarette and alcohol advertisements. | | 3. Cigarette Advertisements | |
| O. Discuss alternative ways of responding to cigarette and alcohol ads. | | | |
| P. Advertisers make individuals believe that cigarettes and alcohol will make their life more enjoyable. | | | |
| P. Smoking or drinking does not make individuals more popular or successful. | | | |
| P. Smoking and drinking is not clean and healthy as depicted in the ads. | | | |
| O. Discuss how advertising campaigns target specific groups. | | 4. Targeted Advertisements | |
| O. Summarize the major points of this session. | | 5. Assign Homework | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Alcohol and Marijuana: Myths and Realities**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Describe some of the effects of alcohol on the body. | | 1. Drinking Prevalence | |
| O. Describe what marijuana is. | | | |
| P. Alcohol is a drug. People use drugs for a variety of reasons. All drugs produce effects, some of which may be harmful. | | | |
| O. Discuss immediate effects of marijuana. | | | |
| O. Recognize most adults drink occasionally and in moderation. | | | |
| O. Identify different ways to drink. | | | |
| P. There are several different types of drinking. | | | |
| P. Some types are considered acceptable for adults. | | | |
| P. Some types may be dangerous or destructive. | | | |
| P. 77% of high school seniors report their friends would disapprove if they drank regularly. | | | |
| O. Identify that most teens and adults don't smoke marijuana. | | 2. Marijuana Prevalence | |
| P. Fewer people smoke marijuana than we think. | | | |
| P. 58% of students perceive moderate or great risk from occasional use of marijuana. | | | |
| P. 81% of students perceive moderate or great risk from regular use of marijuana. | | | |
| P. 76% of high school seniors report their close friends would disapprove if they smoke marijuana. | | | |
| O. Discuss the consequences of drinking and marijuana use. | | | |
| O. Discuss reasons for and against drinking or smoking marijuana. | | 3. Student Handout: *Reasons for and Against Drinking and Smoking Marijuana* | |
| O. Discuss realities of what marijuana and alcohol can and cannot do. | | | |
| P. It's important to consider the consequences of use. | | | |
| P. The decision to not drink or use marijuana is a personal one. | | | |
| P. There is nothing magical about alcohol or marijuana. | | | |
| O. Understand that drinking is not an effective way to cope. | | | |
| O. Recognize that getting drunk isn't cool or grown-up. | | | |
| O. Summarize the major points of the class. | | 4. Assign Homework | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Assertiveness**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Identify common situations where people often fail to be assertive. | | 1. Student Handout: *When the Going Gets Tough* | |
| O. Identify passive, aggressive, and assertive behavior. | | | |
| O. Define "assertiveness." | | | |
| O. Identify reasons why most people are not assertive. | | | |
| O. Identify the benefits of assertiveness. | | | |
| P. There are a number of benefits to be gained from being assertive. | | 2. Student Handout: *You're Under Arrest* | |
| O. Summarize major points of this session. | | | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Communication Skills**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | 1. Game of "Telephone" | |
| O. Define "communication." | | 2. What is Communication? | |
| O. Define "effective communication." | | | |
| P. Effective communication exists when two people interpret a message in the same way. | | | |
| O. Distinguish between verbal and nonverbal communication. | | | |
| O. Discuss importance of having your nonverbal and verbal behavior match. | | | |
| O. Illustrate how nonverbal behavior may be interpreted in different ways. | | 3. Verbal and Nonverbal Communication Activities<br>1. Examples<br>2. "Hi"<br>3. Emotion Cards<br>4. Magazines | |
| P. We often communicate a message which differs from the one we intend. | | | |
| P. Unconscious feelings may be manifested through nonverbal behavior. | | | |
| P. It is important to be conscious of our message. | | | |
| O. Define "misunderstanding." | | | |
| O. Recognize that misunderstandings can lead to conflict. | | 4. Avoiding Misunderstanding<br>(LST Videotape #2)<br><br>5. Student Handout: *You Don't Understand*<br>Student Handout: *Get the Message*<br>Review *Skills for Avoiding Misunderstandings* | |
| O. Demonstrate how to clear up misunderstandings. | | 6. The Value of Asking Questions<br>(Drawing) | |
| P. Misunderstandings can lead to conflict. | | | |
| P Voice, body, and situational cues can lead to conflicts. | | | |
| P. To avoid being misunderstood, be specific, match words, tone of voice, and body language. | | | |
| P. To avoid misunderstanding, restate message, ask questions, read cues from voice and body language. | | | |
| O. Discuss techniques on avoiding misunderstandings. | | | |
| P. Asking questions can dramatically improve your understanding of what someone means. | | | |
| O. Summarize the major points of the session. | | 7. Assign Homework<br>Student Handout: *Clearing the Air* | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Coping With Anxiety**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Participate in an experiment which produces anxiety. | | 1. Anxiety Experiment | |
| O. Define "anxiety." | | | |
| O. Identify physical "symptoms" of nervousness. | | | |
| P. Anxiety produces physical changes in the body. | | | |
| O. Discuss common situations which produce nervousness. | | 2. Situations which cause anxiety<br>Homework Discussion: *Coping with Anxiety* | |
| O. Discuss alternative ways of dealing with anxiety-inducing situations. | | | |
| P. People deal with situations that produce anxiety in various ways. | | | |
| O. Practice techniques for coping with anxiety. | | 3. Techniques for Coping with Anxiety<br>Relaxation Exercises (#1) (Tape)<br>Student Handout: *Staying Cool*<br>Mental Rehearsal (#2<br>Deep Breathing (#3) | |
| O. Summarize the major points of this session. | | 4. Assign Homework<br>Student Handout: *What Really Bugs Me* | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Decision Making**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Identify everyday decisions. | | 1. Group Discussion on Everyday Decisions | |
| O. Review the things that influence our decisions. | | | |
| O. Describe how important decisions are made. | | 2. Group Discussion on Important Decisions | |
| O. Identify a process for making decisions. | | | |
| O. Describe how personal goals impact our decisions. | | 3. Decision Making Practice<br>Student Handout: *"What to do? What to do?"* | |
| P. Personal goals relate to the choices and consequences of decisions. | | | |
| P. If a choice has an outcome that doesn't meet your personal goal it isn't a good choice for you. | | | |
| O. Practice decision making process as a class. | | 4. Decision Making Practice<br>Student Handout: *"A Step to Freedom"* | |
| O. Practice decision making individually. | | | |
| O. Practice decision making with handout. | | | |
| P. There is no right answer to making a decision. | | | |
| P. Working through the process will help you make decisions that meet your personal goals. | | | |
| P. Big decisions may take some time and can be broken down into smaller decisions. | | 5. Assign Homework<br>Student Handout: *Reasons for and Against Smoking* | |
| O. Summarize the major points of this session. | | | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Self-Image and Self-Improvement**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Define self-image. | | 1. Student Handout: *Musical Terms: Me, Myself and I* | |
| O. Describe personal self-image. | | | |
| P. A single word describes only part of our self-image. | | 2. Student Handout: *The Marble Champ* | |
| P. Sometimes we focus on the negative and it's hard to feel good about ourselves. | | | |
| P. Sometimes it's difficult to talk about ourselves in front of others. | | | |
| O. Identify that people have many self-images. | | | |
| P. Our self-images are as numerous as our activities. | | | |
| P. We should never generalize from one or two bad experiences. | | 3. Assign Homework Student Handout: *Me, Myself and I (Section 4)* | |
| O. Describe relationship between self-image and behavior. | | | |
| P. We tend to act like the person we believe ourselves to be. | | | |
| P. Sometimes those who feel poorly about themselves do things that they think will make them feel better. | | | |
| P. Drugs will not make you feel better about yourself, they will actually make you feel worse. | | | |
| O. Describe how self-image is formed. | | | |
| P. Past experiences. | | | |
| P. Other people's opinions. | | | |
| P. Our own opinions. | | | |
| P. What we see in media/culture. | | | |
| O. Summarize major points of lesson. | | | |

**Life Skills Training Monitoring Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Smoking and Biofeedback**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Define heart rate. | | | |
| O. Identify situations that can change heart rate. | | | |
| O. Describe the purpose of a pulsemeter. | | | |
| O. Describe the procedure used in the pulsemeter experiment. | | | |
| O. Discuss the difference in heart rates after smoking a cigarette. | | | |
| O. Describe the effect of elevated heart rate on the body. | | | |
| P. Heart rate fluctuates throughout the day and is affected by such things as physical exercise, emotions, and relaxation. | | | |
| P. Smokers have elevated heart rates due to the carbon monoxide and nicotine in cigarette smoke. | | | |
| P. A constantly elevated heart rate puts an extra strain on the heart. | | | |
| P. Smoking decreases the length of time one can sustain physical activity - i.e., it decreases physical endurance. | | | |
| O. Identify the belief that smoking produces a relaxing effect. | | | |
| O. Discuss the purpose and procedure of the tremor test. | | | |
| P. Tremor test developed by psychologists to test how relaxed a person is before and after intake of drug (cigarettes). | | | |
| O. Discuss the difference in scores of smokers before and after smoking a cigarette. | | | |
| O. Describe the real effect of nicotine anxiety. | | | |
| P. Smoking decreases hand-steadiness. | | | |
| P. The nicotine in cigarette smoke acts as a stimulant. | | | |
| P. Rather than "calming down," smoking serves to make a person more nervous. | | | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Smoking Myths and Realities**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Identify that the majority of teenagers and adults are not cigarette smokers. | | 1. Smoking Prevalence | |
| P. The majority of people are non-smokers. | | | |
| O. Discuss reasons young people have for smoking or not smoking cigarettes. | | 2. Cost of Smoking | |
| O. Discuss the realities of what cigarettes can and cannot do. | | 3. Student Handout: *Reasons for Smoking/Not Smoking* | |
| P. Cigarettes are not magical. | | | |
| O. Explain the long-range effects of cigarette smoking. | | 4. Student Handout: *What Can Smoking Do To Me Right Now?* | |
| P. Cigarette smoking is a major disease risk factor. | | | |
| P. Survival for tobacco-related disease is poor. | | 5. Student Handout: *Heart Rate* | |
| P. Three major diseases account for 58% of all deaths. | | | |
| P. Over 400,000 people a year die from smoking. | | | |
| O. Describe the immediate effects of cigarette smoking. | | | |
| O. Define heart rate. | | | |
| O. Identify situations that can change heart rate. | | | |
| O. Identify the reasons for elevated heart rates. | | | |
| O. Describe the effect of elevated heart rates on the body. | | | |
| P. Heart rate fluctuates and is affected by activities, emotions, and relaxation. | | | |
| P. Smokers have elevated heart rates. | | | |
| P. A constantly elevated heart rate strains the heart. | | | |
| P. Smoking decreases stamina. | | | |
| O. Identify belief that smoking produces relaxing effects. | | | |
| O. Describe the real effect of nicotine on anxiety. | | | |
| P. Smoking decreases hand steadiness. | | | |
| P. Nicotine in cigarettes acts as a stimulant. | | | |
| P. Rather than "calming down" smoking makes people more nervous. | | | |
| O. Describe the process of becoming a smoker. | | | |
| P. There is a pattern to smoking that people usually follow in developing the habit. | | | |
| P. It is difficult for regular smokers to quit smoking. | | | |
| O. Identify how smoking is becoming less socially acceptable. | | 6. Assign Homework<br>Student Handouts: *Smoking Word Puzzle; Smoking and Biofeedback; Reasons for and Against Smoking Marijuana* | |

**Life Skills Training Completion Form**

**Session: Smoking Myths and Realities (continued)**

| Objectives/Points to Make | | Scale # | Topics/Activities | Scale # |
|---|---|---|---|---|
| P. | Fewer people smoke. | | | |
| P. | More and more adults are quitting smoking. | | | |
| O. | Discuss non-smokers' rights. | | 7. Discuss Non-Smoker's Rights. | |
| P. | Non-smokers are becoming more assertive. | | | |
| P. | Sidestream smoke has higher concentrations of hazardous substances. | | | |
| P. | Sidestream smoke causes non-smokers to be "passive" smokers. | | | |
| P. | Passive smoking is irritating and hazardous to non-smokers. | | | |
| O. | Summarize the major points of the lesson. | | | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Social Interactions**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Identify reasons for being shy or uncomfortable in social situations. | | 1. Student Handout: *Breaking the Ice* | |
| P. Even if we're not shy, some situations make us uncomfortable. | | | |
| P. We are not alone in feeling anxious about social situations. | | | |
| P. People are generally concerned about how others will view them. | | | |
| P. Certain uncomfortable situations can create anxiety if we don't know the right things to say. | | | |
| O. Discuss how shyness can be overcome. | | | |
| P. Can learn to "act." | | | |
| P. Can practice acting with scripts and in mirror. | | | |
| P. Can practice skill in non-threatening environment. | | | |
| P. Recognizing that the other person is just as uncomfortable can ease anxiety. | | | |
| P. Starting small by practicing is a good way to overcome shyness. | | | |
| P. Using alcohol or drugs to overcome shyness is very dangerous. | | | |
| O. Discuss ways to initiate social contacts. | | | |
| P. Pick someone who looks easy to talk to. | | | |
| P. Introduce yourself and say something you might have in common. | | | |
| P. Give a compliment and ask a question. | | | |
| P. Ask or offer help. | | | |
| P. Use an old stand-by (the weather). | | | |
| O. Identify various ways of initiating, sustaining, and ending conversations. | | 2. Conversation Skills<br>Student Handout: *Feel the Rhythm, Keep the Beat* | |
| P. The rhythm of a good conversation can be broken by: offending someone, cutting them off midsentence, or not paying attention. | | | |
| O. Practice giving and receiving compliments. | | | |
| P. Sometimes people feel self-conscious about physical compliments, so compliment something neutral. | | | |
| O. Summarize the major points of this session. | | | |

**Life Skills Training Completion Form**
**Year 1**

**School** _____ **Teacher** _____ **Class Period** _____ **Date** _____

**Class #** _____

**Session: Social Situations**

**Directions:** The goal of this form is to assess coverage of the LST program in the classroom. On a scale from 1-5, please indicate to what extent each point, objective, or activity was covered. (0=not covered; 1=very low; 2=low; 3=neutral; 4= high; 5=very high) Please provide a narrative concerning the appropriateness and effectiveness of the materials in the curriculum.

| Objectives/Points to Make | Scale # | Topics/Activities | Scale # |
|---|---|---|---|
| Introduction | | | |
| O. Identify various social situations. | | | |
| O. Discuss various interaction styles in social settings. | | | |
| P. Not all settings call for the same response. | | | |
| P. We naturally switch behavior depending on who we are with. | | | |
| P. We can learn how to switch our style for situations where we are uncomfortable. | | | |
| P. Some of the style we use is descriptive of our culture. | | | |
| O. Discuss feelings on talking with someone you are attracted to. | | 1. Role Play Situations | |
| P. It is natural to feel shy and nervous when talking to someone you are attracted to. | | | |
| P. The same skills used when having a good conversation can be used. | | | |
| O. Identify social activities which might be suggested for dating. | | | |
| P. It's best to have something specific in mind. | | | |
| P. Make the person feel comfortable first. | | | |
| P. Act as if you expect the person to want to go. | | | |
| O. Practice techniques for asking someone out on a date. | | | |
| O. Summarize the major points of this session. | | 2. Assign Homework: *When the Going Gets Tough* | |

## BEHAVIORAL REHEARSAL CHECKLIST

| | YES | NO |
|---|---|---|
| 1. Did the trainer state the purpose of the behavioral rehearsal? | ☐ | ☐ |
| 2. Did the trainer ask for volunteers? | ☐ | ☐ |
| 3. Did the trainer set up the behavioral rehearsal by: | | |
| developing the situation using ideas from the group? | ☐ | ☐ |
| developing the place by using ideas from the group? | ☐ | ☐ |
| developing what each character will say using the group? | ☐ | ☐ |
| 4. Did the trainer give clear easy directions to each actor? | ☐ | ☐ |
| 5. Did the trainer end the behavioral rehearsal after the main point was made, or steer the behavioral rehearsal toward the goal as needed? | ☐ | ☐ |
| 6. Did the trainer process the behavioral rehearsal by asking questions like: | | |
| was the behavioral rehearsal effective? | ☐ | ☐ |
| what did you notice about their body language? | ☐ | ☐ |
| 7. Did the trainer ask students to identify components of the skills? | ☐ | ☐ |
| 8. Did the trainer ask for alternate ways of handling the behavioral rehearsal? | ☐ | ☐ |
| 9. Did the trainer redo the behavioral rehearsal using the new suggestions? | ☐ | ☐ |

Please list some of the things you liked about the way the trainer conducted this behavioral rehearsal:

_____

_____

Please list some reminders or helpful hints you would offer this trainer:

_____

_____

_____

_____

## COACHING CHECKLIST

| | YES | NO |
|---|---|---|
| 1. Did the trainer define the goal? | ☐ | ☐ |
| 2. Did the trainer give explicit step-by-step instructions? | ☐ | ☐ |
| 3. Did the trainer demonstrate the behavior correctly? | ☐ | ☐ |
| 4. Did the trainer review the step-by-step instructions? | ☐ | ☐ |
| 5. Did the trainer give group a chance to practice? | ☐ | ☐ |
| 6. Did the trainer elicit and give feedback based on group's performance? | ☐ | ☐ |
| 7. Did the trainer reinforce the effective behavior? | ☐ | ☐ |

Please list some of the things you liked about the way the trainer conducted this activity:

Please list some reminders or helpful hints you would offer this trainer:

## FACILITATOR CHECKLIST

| | YES | NO |
|---|---|---|
| 1. Did the trainer state the purpose of the discussion? | ☐ | ☐ |
| 2. Did the trainer successfully steer the discussion by asking open ended questions? | ☐ | ☐ |
| 3. Did the trainer ask non-intimidating questions? | ☐ | ☐ |
| 4. Did the trainer allow sufficient "wait time" after asking questions? | ☐ | ☐ |
| 5. Did the trainer critique to encourage? | ☐ | ☐ |
| 6. Did the trainer bring closure to the discussion? | ☐ | ☐ |

Please list some of the things you liked about the way the trainer led this discussion:

Please list some reminders or helpful hints you would offer this trainer:

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