

# ***Preventing Adolescent Drug Abuse through Life Skills Training: Theory, Evidence of Effectiveness, and Implementation Issues***

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Over the past two decades, a number of exciting advances have occurred in the field of drug abuse prevention. Our understanding of the causes of drug abuse and how to prevent it have increased dramatically. Although drug use among American youth has increased markedly since 1992 (Johnston, O'Malley & Bachman, 1995), we finally have the tools to combat this serious problem. Nearly 20 years of prevention research has led to the development of several approaches designed for use in middle schools or junior high schools. One of the most prominent and extensively tested of these is an approach called Life Skills Training.

In this chapter, the Life Skills Training program will be described, evidence supporting its effectiveness will be briefly summarized, and several key implementation issues will be discussed. Before discussing the LST program, however, it is worth saying a few words about the kind of prevention approaches that were used previously, the development of prevention approaches focusing on social influences to use drugs, as well as the theory supporting the LST program.

## **Approaches to Teaching Information**

A variety of approaches have been developed and used in schools throughout this country. The most common of these involves providing students with information about the dangers of smoking, drinking, and using illegal drugs. Despite the fact that these approaches seem like a logical approach to the problem of drug abuse, numerous studies have shown clearly that they do not work; they do not decrease teen drug use. Similarly, research has also shown that trying to scare kids into not using drugs by dramatizing the dangers of drug use do not work. Yet, notwithstanding the fact that neither approach is effective, many schools across the country continue to use one or both of these approaches to prevent or deter adolescent drug use.

## **Changing the Focus to Social Influences**

The first major breakthrough in the US came from a seminal study conducted by Richard Evans and his colleagues at the University of Houston (Evans, Henderson, Hill & Raines, 1979). Evans paid attention to the social context and the social risk factors associated with problems like tobacco, alcohol and illegal drug use. His initial research in this area focused on testing an approach intended to psychologically "inoculate" adolescents against social influences promoting cigarette smoking. His prevention approach was designed to expose adolescents to social pressures to smoke B first in a relatively weak form and then in gradually stronger forms. This prevention approach also provided students with more accurate information about the prevalence of smoking to correct the misperception that

“everybody’s doing it” and taught skills for resisting social influences to smoke. That study showed that it was possible to cut new cigarette smoking in half. This early success attracted considerable attention and encouraged other researchers to test variations on his prevention approach.

### **The Developing Science of Prevention**

As the field of prevention research evolved during the 1980s and early 1990s, researchers began to test the extent to which these social psychological prevention approaches were also effective with other forms of substance use and other types of problem behavior. The initial focus of this research was on assessing the impact of various prevention approaches on initiation (i.e., the transition from non-use to use) and relatively low levels of use. The principal measure used in most of these studies has been tobacco, alcohol, or marijuana use in the past thirty days. Some studies have also tested the efficacy of prevention approaches using measures assessing use in the past week or previous day. Only recently have studies begun to look at the efficacy of prevention programs on more serious levels of drug involvement, as the length of follow-up increased and the age of participants increased to the point where such measures were meaningful. The field of drug abuse prevention has also moved from small-scale, quasi-experimental studies involving a few hundred students from two schools to large-scale, randomized controlled trials involving several thousand kids from thirty or more schools.

The quality and sophistication of the research methods used in these studies have also improved markedly over the past two decades. This has included improvements in assessment, stronger research designs, strategies for dealing with potential problems such as differential attrition, and more sophisticated methods of data analysis. The field also began to move from short-term studies, with pretests and posttests and the inclusion of control groups, to longer-term studies. The follow-up interval has gradually increased from the initial posttest to one and two year follow-ups. More recently, follow-up study intervals have increased to five years or more after the initial posttest. These studies have given us important data concerning how long prevention effects last.

### **Supporting Theory**

**How Drug Abuse Develops.** The prevalence of drug use generally increases with age and progresses in a well-defined sequence (Millman & Botvin, 1992). This sequence progresses in two ways. One is in terms of the use of a single substance where the developmental progression occurs mainly with respect to the amount and frequency of use. Here the progression occurs with the transition from non-use to initial use, to occasional (annual or monthly) use, and to more frequent (weekly and daily) patterns of use along with an escalation of the amount used. With dependency-producing drugs, this escalation in both the frequency and amount of use typically eventuates in the development of tolerance (where larger and/or more frequent administrations of the drug are required to produce the same psychoactive effect) and in both physical and psychological dependence. The other way the sequence of drug use progresses is in terms of the type of drug or drugs used. For most individuals, alcohol and tobacco are the first substances used. Because of their availability, inhalants are also one of the first substances used. Later, individuals progress to the use of marijuana. The use of these substances provide adolescents with an introduction to the world of drugs. For some individuals, the use of these substances may lead to the use of stimulants, opiates, hallucinogens, cocaine, and other illicit substances. The probability of using any substance in this developmental progression increases significantly with the use of one or more substances

earlier in the progression. Thus, the use of tobacco, alcohol, and inhalants significantly increases the risk of using marijuana, and the use of these "gateway" substances significantly increases the risk of using illicit drugs other than marijuana.

Moreover, any level of use (even trying a drug just once) significantly increases the risk of developing serious drug-related problems. Thus, experimentation with drugs or occasional drug use are risk factors for drug abuse and other drug-related problems. For this reason, drug abuse prevention programs targeting youth should focus on preventing the early stages of drug involvement as a method of reducing drug abuse risk. For middle or junior high school students, this might involve attempting to prevent "first use" or occasional (annual or monthly) use. For high school students, it might involve attempting to deter more serious levels of drug involvement (e.g., weekly or daily use of a single drug, the use of multiple drugs, or "heavy" use) as well as preventing drug-related problems such as accidents or violence. Because of the mortality and morbidity associated with tobacco and alcohol and because the use of marijuana dramatically increases the risk of using other illicit substances, drug abuse prevention programs should focus primarily on preventing the use of tobacco, alcohol and marijuana. Because there is a direct relationship between the age of onset and the subsequent development of serious drug-related problems, prevention programs are likely to be valuable even if they merely delay drug use initiation or prevent the transition from occasional use to more serious levels of drug involvement.

**Risk and Protective Factors.** A growing body of research indicates that there is no single factor or single pathway to drug abuse. Rather, drug abuse is the result of a combination of factors (Hawkins, Catalano & Miller, 1992; Newcomb & Bentler, 1989). The greater the number of risk factors that an individual has, the more likely it is that he/she will become a drug user and eventually a drug abuser since the presence of multiple risk factors is associated with both initial drug use and with the severity of later drug involvement (Newcomb & Felix-Ortiz, 1992; Scheier & Newcomb, 1991). More recently, the concept of "protective" factors has been introduced to refer to factors that may decrease risk for becoming a drug user. Some have used this notion to simply refer to factors that decrease risk. In this case, a protective factor is simply viewed as the opposite of any given risk factor (for example, high family bonding instead of low family bonding). However, a more complex definition of protective factors has also been advanced that distinguishes them from risk factors. According to that definition, a protective factor is one which buffers the impact of a risk factor B i.e., an independent factor that decreases the likelihood of drug use in the presence of one or more risk factors.

**Interaction of the Individual and the Environment.** Like other types of human behavior, the initiation and maintenance of drug dependence is conceptualized as being the result of a dynamic interaction of individuals and the environment (Bandura, 1977; Jessor & Jessor, 1977). 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 (T.V. shows and movies glamorizing drug use or suggesting that drug use is normal or socially acceptable, as well as advertising efforts promoting the sale of alcohol and tobacco products). Others may be influenced to use drugs by family members who either use drugs or express pro-drug use attitudes, and/or by friends and acquaintances who use drugs or hold attitudes and beliefs supportive of drug use.

These factors both shape and interact with the adolescent's cognitive expectancies (attitudes, beliefs, normative expectations, drug-related health knowledge), general competencies (personal self-management skills, social skills), and drug resistance skills (i.e., skills for resisting social influences from both the media and peers to use drugs). Vulnerability

to pro-drug use social influences can also be affected by psychological factors such as self-efficacy, self-esteem, personal control, psychological adjustment, and perceived life chances.

### **What This Means For Prevention**

This suggests several potential points of intervention for either preventing drug abuse or reducing drug abuse risk. Interventions can and should be developed to target individual, family, and community determinants of drug abuse. However, most prevention research has focused on testing the effectiveness of school-based interventions targeting individual-level risk factors. A school-based intervention is likely to effectively prevent drug abuse if it 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 internal motivations to use drugs and by reducing vulnerability to pro-drug social influences).

### **The Life Skills Training Approach**

The Life Skills Training (LST) program includes three major components: one component is very similar to the prevention approach that evolved from the work of Evans and his colleagues in which they focused on helping adolescents resist social influences to use drugs. The two other components focus on competence enhancement with an emphasis on teaching self-management skills and general social skills.

It was our understanding of the general constellation of risk factors that even if you have an effective prevention approach that targets the social factors, as Evans and others did starting in the late 1970s, you could not simply teach kids the skills to say no and assume that they would naturally use those skills and say no. As it turns out, a lot of kids do not want to say no, they want to say yes. We believed that to be effective prevention approaches must not only give kids the skills they needed to deal with high-risk situations where they might be offered tobacco, alcohol, marijuana or other drugs. They must also teach a broader set of skills as a means of decreasing potential motivations to use drugs or engage in other problem behaviors.

#### ***Drug Resistance Skills***

The drug resistance skills component in the LST program is similar to that tested in many other studies by researchers at the University of Southern California, the University of Minnesota, Stanford University, and the Oregon Research Institute. The various elements of the drug resistance skills component include the following:

- Making students aware of the pro-drug social influences they are likely to experience as they move through middle or junior high school (which includes students during the beginning of the adolescence period starting from ages 11 to about 14),
- Reinforcing anti-drug norms or correcting the misperception that everybody is using drugs,
- Providing prevention-related knowledge that is likely to be personally relevant to students and to have direct relevance for prevention, and
- Teaching students a set of drug refusal skills.

These are the main components of the social influence strategy that we have incorporated into the LST approach along with the other components that will be described below. There are numerous studies with just these elements. Overall, these studies have produced reasonably strong prevention effects. But those effects have not been very durable over time and they have not demonstrated an impact on serious levels of drug involvement.

### ***Self-Management Skills***

A second major prevention component of the LST approach focuses on self-management skills. Included in this component are a set of important skills which teach students how to cope with the complexities of life B such as problem-solving and decision-making, skills for coping with stress and anxiety, and a set of skills that we refer to as personal behavior change skills. These personal behavior change skills include teaching adolescents how to set short-term and the long-term goals, monitor their progress toward those goals, and reward their own personal efforts as they achieve the goals that they set for themselves.

### ***Social Skills***

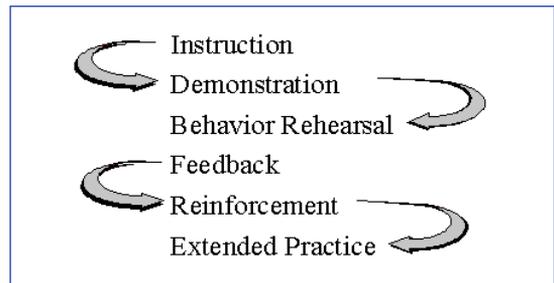
Through the LST program, we also teach a set of general social skills. First, we focus on teaching students effective communication skills (for example, how to avoid misunderstandings, greetings and brief social exchanges, how to meet new people, and how to build healthy friendships and form healthy and positive peer relationships). Next, we teach them conversational skills B how to start a conversation, how to sustain it, how to bring it to a graceful conclusion. Also, we teach students how to give and receive compliments.

Some other skills students learn through the LST program include social skills relating to dating B boys asking girls for a date and also girls asking the boys for a date. Also, students learn general assertive skills and practice them in the classroom. Students are taught how to stand up for their rights, how to make requests, and how to refuse unreasonable requests. Where possible, real-life situations are used for practice. For example, students are taught how to handle a situation involving buying something that does not work B like a watch. We may include a scenario where the student bought a watch from the shopkeeper only to discover that the watch did not work. The student then needed to practice bringing the watch back, telling the shopkeeper the watch did not work and that she would like her money back or would like to have the watch fixed or replaced.

### ***Skills Training Method***

The LST program teaches an array of general skills that many of us, to greater or lesser degree, have learned during the course of our lives. Many of these skills can be learned, without the help of a program such as LST, by associating with positive adult role models through a natural process of modeling, imitation, and reinforcement. In the past, many of these skills were learned from parents or other positive adult role models. However, one unfortunate aspect of contemporary life is that students are spending less time with their

### **Teaching Techniques**



parents and more time with peers. Instead of having the opportunity to learn these and other important life skills from positive adult role models, students spend most of their time with other students who themselves have not yet mastered these life skills; it is a situation of the blind leading the blind.

Since there seem to be few natural opportunities for adolescents to learn these skills, we thought it was important to put together a curriculum that would help to systematize a method for teaching these skills in the classroom. If a child has deficits in any of these skill areas, he or she is at increased risk for using drugs as well as for a number of other problems. All of these skills are taught using what we refer to as “coaching.” There is a combination of instruction and demonstration, practice of the skill, feedback, reinforcement and extended practice to behavioral homework assignments.

### **Who Conducts the LST Program**

At Cornell, we have found in our research--and this is similar to other research conducted in the United States--that these kinds of prevention approaches (the general life skills approach and the social resistance skills approach) can be successfully implemented by a variety of program providers including outside health professionals, peer leaders, or regular classroom teachers. We have found that any one of these types of providers can implement a program like LST effectively, if they are selected properly. This means that you get volunteers, you do not involve people who do not want to get involved in these programs. These individuals are then given at least one or two days of orientation and training. Generally, if a teacher has good teaching skills, with one or two days of training, you can give them enough of an orientation with a detailed curriculum so that they can follow the curriculum of a program like LST in a way that will be effective.

### **Importance of Standardization**

We believed it was important to initially put the LST program in the form of a research protocol so that we could standardize the way the program was implemented. The next step was to take that research protocol, which was not particularly teacher-friendly or user-friendly in its original form, and to put it into a form that teachers or other program providers could readily use. We put the protocol into the form of a regular curriculum, consisting of a teacher's manual and a student workbook. Both of these steps help standardize and improve the quality of the implementation of the prevention program.

### **Scientific Evidence**

Considerable evidence now exists that demonstrates that the LST program works. More than a dozen major federally funded scientific studies have been conducted over the past twenty years. Below is a brief summary of some of this evidence.

#### ***Immediate Effectiveness***

One of our early studies was a small-scale study that focused on cigarette smoking (Botvin, Eng & Williams, 1980; Botvin & Eng, 1982). This was characteristic of a lot of the work that we were doing toward the end of the 1970s and beginning of the 1980s, as was the case of other researchers at that time in the United States. We looked at schools that had identical smoking rates at baseline, and randomly assigned the schools to prevention and control conditions. After the participating students in both schools were pre-tested, the students assigned to the prevention condition received the LST program, while the controls

received nothing. After the prevention program was completed (three months after the initial pre-test), we conducted the first posttest.

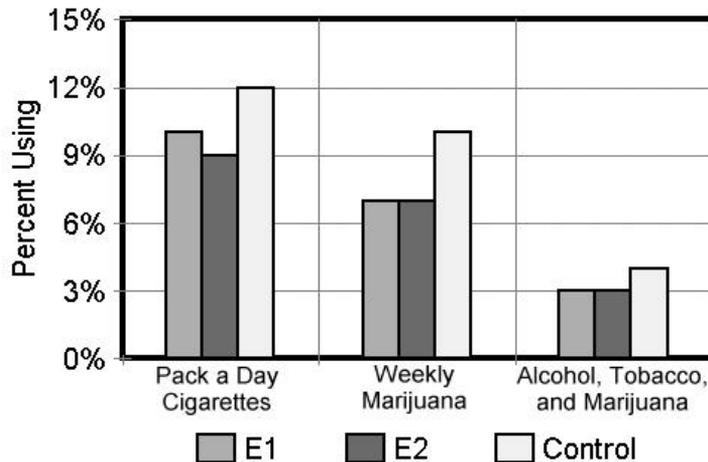
We demonstrated that we were able to reduce cigarette smoking (smoking one or more cigarettes in the past month), by more than 50%, in some cases as high as 75%. For example, in one study, only 4% of the students who received the LST program began to smoke cigarettes between the pretest and the posttest compared to 16% in the control group. That represents a relative reduction in the two proportions of 75%. The impact of the LST program was not always that strong in all studies, but in most cases we have been able to demonstrate that we can cut drug use in half. Whether we looked at the incidence or the prevalence of drug use, our findings were largely the same. Those early studies showed us that the LST program was able to cut the incidence and/or the prevalence of drug use by 50 to 60%.

### ***Booster Sessions and Long-Term Effectiveness***

At the one-year follow-up, the impact on the two groups was essentially the same as the initial posttest with the prevention group, the LST group, still being significantly better than the control group (Botvin, Renick & Baker, 1983). However, it became clear in other studies with longer follow-up that without ongoing intervention the initial prevention effects gradually eroded over time. For example, the smoking rates of the prevention group tended to increase so that the difference between the prevention and control groups became smaller over time.

On the other hand, we have found that providing students with an additional year of the prevention program, what were conceptualized as “booster sessions,” produced dramatic differences between the booster group when compared to either the non-booster group or the control group. In one study, we found that the rate of smoking initiation was 87% lower for the students receiving both the LST program in the seventh grade and booster sessions in the eighth grade (Botvin, Renick & Baker, 1983). We saw the same thing with marijuana, with even more striking differences at the initial posttest (Botvin, Baker, Renick, Filazzola & Botvin, 1984). This was a much larger study involving 10 schools and 3,000 students, again there were rather strong effects emerging from the group getting the LST program during the first year and booster sessions in the second year of the prevention program. There was no erosion of the prevention effects for the group receiving booster sessions. However, there was a continuing increase in marijuana use in the control group and also an increase in marijuana

## **Adjusted Drug Use Prevalence Rates by Condition: Full Sample (3,597)**

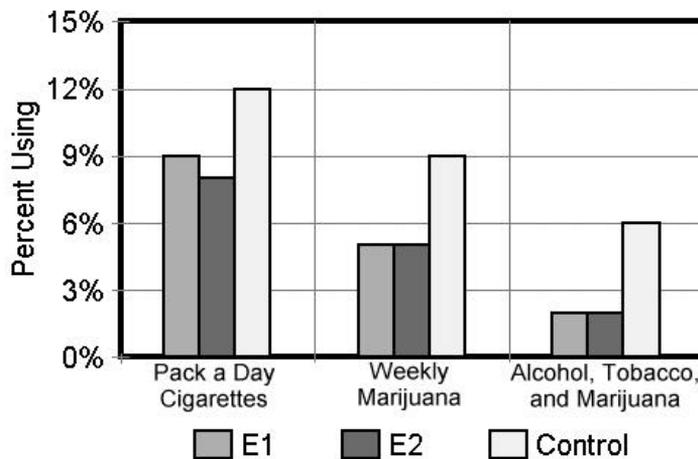


use among the students getting the prevention program the first year but not in the second year.

Long-term effectiveness was also demonstrated in a major prevention study involving 56 schools and nearly 6,000 students in New York State (Botvin, Baker, Dusenbury, Tortu & Botvin, 1990; Botvin, Baker, Dusenbury, Botvin & Diaz, 1995). Schools were randomly assigned to receive the LST prevention program either with or without a teacher training workshop and ongoing support by project staff. Both LST groups received the prevention program in grade 7 with booster sessions in grade 8 and 9. Despite some differences in the two groups, both groups that received the LST program showed significantly lower rates of drug use at the end of junior high school (grade 9) and at the end of high school (grade 12) than the control group. The rate of drug use was up to 44% lower at the end of high school for the LST students and the rate of polydrug (multiple drug use) was up to 66% lower. A subgroup of these students was studied one year after the end of high school in terms of the use of illicit drugs other than marijuana (Botvin, Griffin, Diaz, Scheier, Williams & Epstein, 1998). These results showed significantly lower levels of narcotics and hallucinogens as well as lower levels of inhalant use. Taken together, these results show that the LST approach to drug abuse prevention:

- Reduces initial experimentation with tobacco, alcohol, and marijuana;
- Produces effects that are durable; and

### Adjusted Drug Use Prevalence Rates by Condition: Fidelity Sample (2,752)



- Can reduce the use of more serious levels of drug use including pack-a-day cigarette smoking, polydrug use, and the use of illicit drugs other than marijuana.

### Implementation Issues

Importance of Careful and Complete Implementation. There are a number of barriers to high quality prevention programming. Some of these barriers are a lack of adequate resources, low commitment to the prevention program by teachers or administrators, poor teacher training or preparation, low teacher morale or teacher “burnout,” poor classroom discipline, and insufficient time. One or more of these barriers can undermine the

effectiveness of even the best prevention programs if they result in the prevention program being only partially conducted or conducted in a way that deviates from the design of the program.

The effects of poor implementation have been observed in our own research with the LST program (e.g., Botvin, et al., 1995). If you look only at those students whose teachers implemented the program fully or almost fully, the prevention effects are quite strong. However, if you examine the effect of the prevention program where the teachers implemented the program only partially, even with a prevention program that has been demonstrated to be effective, we have found that the prevention effects are much weaker. Although many of us would like to see every single aspect of the prevention program implemented, the reality is that even the best program providers may not conduct the prevention program exactly as designed. However, our research shows that if most of the prevention program is taught then we can still produce reasonably strong prevention effects. But if the program is implemented only partially, say two or three sessions out of the fifteen-session program, it is unlikely to produce any effects at all. How the program is implemented and how completely the program is implemented is critically important.

### **The Importance of an Adequate Dosage**

This ties into the issue of dosage and what might be called the “therapeutic” threshold. To understand this concept, consider the example of a medication designed to treat a particular problem (for example, high blood pressure). Suppose a 300-milligram dosage was required for the medication to be effective and a patient only takes 100 or 200 milligrams. The medication will not be effective because the dosage does not reach the required therapeutic threshold B that is, it is less than the dosage needed to achieve a beneficial effect from the medication. Even though the medication works when taken in the correct dosage, it will not work if someone takes a partial dosage and it will not produce the desired effects.

It might be argued that the same thing occurs in prevention. To be effective, it is necessary to have an adequate prevention dosage to reach the minimum “therapeutic” (i.e., prevention) threshold. And, that generally takes more exposure to a particular prevention approach than adolescents are provided in most current prevention programs. Unfortunately, many prevention efforts may utilize either an ineffective prevention approach or rely on a minimal prevention dosage (two or three classes, a poster contest, an assembly program, etc.) to do something about a very complex problem. It is, therefore, not surprising that so many prevention efforts fail. Clearly, we need to conduct prevention programs that not only utilize effective approaches, but also contain an adequate dosage (at least 12 to 15 classes during the beginning of junior high school), include booster sessions, and are implemented with fidelity to the underlying program. Additional research is necessary to better understand how to overcome barriers to successful implementation of effective prevention programs as well as to determine the appropriate dosage.

### **Effectiveness with Multiple Populations**

One surprising aspect of our research is the finding that the same type of prevention program can work with a wide range of students. It had been assumed by many that it would be necessary to have different prevention programs for different populations of students. For example, it would be necessary to have separate prevention programs for black students and white students or for urban and suburban students.

Even though the LST program was initially designed for white, middle class adolescents, our research shows that it also works for urban, minority (i.e., African American and

Hispanic) students (Botvin, Dusenbury, Baker, James-Ortiz & Kerner, 1989; Botvin, Dusenbury, Baker, James-Ortiz, Botvin & Kerner, 1992; Botvin, Goldberg, Botvin & Dusenbury, 1993). It works with students in middle schools and junior high schools as well as with students in senior high school, although it is more effective with younger populations. It works well with urban and suburban populations, and we even have some preliminary evidence that indicates it works with rural populations.

In a place like New York City, where we have conducted much of our research, we have over 165 different ethnic groups. If it were necessary to develop specific prevention programs for each different ethnic group, it would be an impossible task. You would have to separate those students into different classes so that you could conduct the appropriate prevention program for each different ethnic group of students. This would create a major logistical problem as students from different ethnic groups were separated for the purpose of conducting ethnic-specific prevention programs. In all likelihood, any effort to separate students into different prevention classes by ethnic group would also prove to be a political impossibility.

To avoid such problems, our only hope is to develop prevention programs that do, in fact, work with a reasonably broad cross-section of individuals. Fortunately, we have found that the LST program does work with several different kinds of adolescents. On the other hand, it might make sense to tailor prevention programs to a particular population in situations where ethnic groups predominate. For example, it would make sense to tailor a program in schools already naturally divided with predominantly black or Hispanic students. In one recently conducted study, the results suggested that tailoring a prevention program to a particular population may increase its effectiveness (Botvin, Schinke, Epstein & Diaz, 1994; Botvin, Schinke, Epstein, Diaz & Botvin, 1995).

## **Summary and Conclusions**

Throughout the course of more than a dozen studies, we have been able to show that we can prevent tobacco, alcohol and marijuana use. We have produced initial reductions at the end of the LST prevention program (at the initial posttest) ranging from about 40 to 75%, though generally closer to 50 to 60%. Although those effects begin to weaken about a year after the conclusion of any preventive intervention, significant prevention effects last up to six years. For example, with a prevention program conducted during junior high school (grades 7 through 9), we have found that we can produce a prevention effect that lasts until the end of high school (grade 12). In addition, we can produce an impact not only on monthly use, but also on more serious levels of involvement. For example, we have shown that we can reduce the proportion of adolescents who smoke a pack of cigarettes (twenty cigarettes) or more per day by 25% after six years. We have also shown that we were able to reduce the proportion of individuals who used multiple substances (tobacco, alcohol, and marijuana) at least once a week by 66%. Finally, we have also been able to demonstrate that we can reduce the use of inhalants, narcotics, and hallucinogens.

The interesting message in our research is that this kind of prevention program does generalize well to a number of problem behaviors B cigarette smoking, alcohol use, marijuana use, and some new evidence from a pilot study that indicates that it can reduce violence-related behaviors. One type of problem behavior that is also affected by the LST program and that we have not yet published on is risky driving. Our research has found that at the end of the twelfth grade, as students began to drive, the students who received the LST prevention program were less likely to have driving violations or to get into trouble for dangerous and risky driving. The fact that the LST approach has already been shown to reduce

several different types of problem behaviors raises the exciting possibility that this type of prevention approach may also reduce still other types of problem behaviors. But, it will take additional research to determine whether or not that is true.

We have found that we can have an impact on a broad range of students because this kind of prevention program works reasonably well with a broad cross-section of students. We also found, however, in one study that if you take a prevention model for a specific population and make it culturally sensitive, that you can actually increase its effectiveness. This does not decrease the importance of the fact that this kind of prevention program is reasonably strong and can work with a broad range of individuals. But, it does indicate that it may be possible to further improve existing prevention approaches by tailoring them, where feasible, to a particular population.

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