Combating Negative Social Influences: Lessons from The Adolescent Alcohol Prevention Trial

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Alcohol and other forms of substance abuse hinder the development, functioning, and well-being of millions of American adolescents on a daily basis. It has been widely documented that a range of adolescent problem behaviors such as unwanted pregnancy, juvenile delinquency, and failure at school are related to the regular use of alcohol and other illicit substances (Hawkins, Catalano, & Miller, 1992). For example, it is almost impossible for teenagers to excel at school if they are caught up in the "up and down cycle" of a substance abusing lifestyle. Most adolescent alcohol and drug abusers do poorly in school and/or drop out, which significantly alters their path toward a productive and healthy adult life.

Social scientists have generated a long list of reasons why teenagers might abuse alcohol and drugs (Petraitis, Flay, & Miller, 1995). Many of these reasons are believed to stem back to early childhood, and are beyond repair by the time the problem behaviors begin to emerge, typically in the eighth through twelve grades. Clinical explanations for why a particular adolescent abuses alcohol and drugs also tend to be complex. Additionally, there continues to be a rather large gap between the science and practice of substance abuse prevention programming. For example, the most popular drug prevention approach in the United States, "Just Say No" or Project D.A.R.E., has reached more than 4.5 million children and adolescents even though there is now a wealth of scientific evidence suggesting that, in its current form, D.A.R.E. does not prevent alcohol and drug abuse (Dukes, Ullman, & Stein, 1996; Ennett, Tobler, Ringwalt, & Flewelling, 1994) and may even be harmful under some conditions (Donaldson, Graham, Piccinin, & Hansen, 1995).

The complexity and overwhelming nature of the alcohol and drug abuse problem, coupled with past programming failures, has caused some to throw their hands in the air and give up on prevention. This reaction fuels arguments for investing more heavily in treatment and supply reduction approaches, rather than prevention, to fight the National "War on Drugs."

However, some of the most recent findings from the best scientific studies on school-based alcohol and substance abuse prevention programs reveal effective strategies that educators can use to prevent adolescent alcohol and drug abuse. The purpose of this chapter is to describe the theoretical and empirical basis of these strategies, as well as provide practical suggestions for implementing a prevention approach known as the social influences approach to adolescent substance abuse prevention.
Deterring Onset

It is important to have realistic expectations for prevention efforts. However, it is not uncommon to think that the goal of a drug abuse prevention program is to prevent participants from ever using or abusing alcohol or drugs. While this would be ideal, this is beyond what we can realistically expect in a school-based drug prevention effort. A more realistic approach is to employ strategies that delay the onset of alcohol and substance use and reduce the prevalence of use among at least a sub-group of adolescents. Interventions that thus deter the onset of substance use are important because they prevent school failure and other problem behaviors during the formative years of early adolescence, and the earlier adolescents begin using alcohol and other substances, the more likely they are to abuse drugs as young adults (Anthony & Petronis, 1995; Hawkins et al., 1997; Kandel, 1982; Robins & Pryzbeck, 1985). When we view drug abuse prevention as focused on deterring the onset of alcohol and drug use, it suggests strategies other than trying to change an adolescent’s personality, scaring youths, or improving general character and the like.

It has become quite clear in recent years that negative social influences are a primary reason why adolescents begin using alcohol, tobacco, and other drugs. Prevention efforts that combat negative social influences in an adolescent's environment are likely to at least delay the onset of substance use. Because there is now a wealth of scientific evidence showing that social influence-based prevention programs have consistently prevented the onset of adolescent substance use (Donaldson et al. 1996; Hansen, 1992; Tobler & Stratton, 1997), recent work has focused on sorting out which components of social influence programs are most effective under specific conditions and across settings. It is this information that we believe is most useful for educators currently dealing with these issues on a day to day basis.

The Adolescent Alcohol Prevention Trial

Most prevention programs reflect the program developers' views of how to optimize program effects. These programs usually incorporate a combination of strategies in the hopes that at least some of them will work (Hansen, 1993). Many evaluations of prevention programs focus on answering the question of whether a program based on a combination of strategies deterred the onset of drug use relative to some comparison or control program. In contrast, the Adolescent Alcohol Prevention Trial (AAPT) was designed to understand how programs work by studying two active ingredients in social influence based programs. This was accomplished by systematically varying the most common approaches for combating negative social influences: Resistance training or "Just Say No," and normative education.

Just Say No

Probably the most common social influence drug abuse prevention strategy is to teach adolescents ways to refuse explicit alcohol and drug offers from peers, older siblings and their peers, and adults. This approach was developed during the 1970s and is commonly called "just say no." It is based on the tenets of social inoculation theory (Evans, 1983). It assumes that adolescents' decision to not drink or use drugs is based on their ability to resist peer pressure. Teaching resistance skills or refusal skills is believed to "inoculate" adolescents from these pressures much like vaccines inoculate people from polio or other contagious diseases. That is, a small safe dose of peer pressure is provided and skills for resisting the pressure are developed. The development of effective refusal skills is the main goal and presumed active ingredient in this prevention approach. The hope is that such an approach will consequently prevent them from abusing alcohol and drugs.
**Normative Education**

In contrast to combating active social pressures (explicit drug offers), normative education is a prevention strategy that attempts to prevent "passive" social pressures. The theoretical basis for normative education can be traced back to the Theory of Reasoned Action of Ajzen and Fisbein (1973) and the more recent formulation of the Theory of Planned Behavior, the Problem Behavior Theory of Jessor and Jessor (1977) as applied to the social cultural model, and Social-Cognitive Learning Theory (Bandura, 1977, 1986). Briefly stated, all youth have beliefs about the prevalence and acceptability of alcohol and drug use. These normative beliefs have been shown to be very good predictors of who will and who will not use alcohol, cigarettes, marijuana, and other drugs. Normative education curricula are designed specifically to combat the influence of these "passive social pressures" known as social modeling and overestimation of peer alcohol and drug use (Graham, Marks, & Hansen, 1991). Much of this approach tries to change inside-the-head beliefs about what is happening in the outside-the-head social world in which teenagers live. The key to success of these programs is that young people are frequently incorrect in their estimates of what other people their own age actually think and do. Normative education programs work by correcting erroneous and exaggerated perceptions social norms, making alcohol and drug use appear less prevalent and accepted than uniformed youths would otherwise assume them to be.

**Evaluation Design**

While other studies have evaluated the effectiveness of drug prevention programs that combine resistance training and normative education, a unique feature of the AAPT experimental design was that it allowed for the separate examination of each prevention strategy. Elementary and junior high schools were randomly assigned to one of the four experimental conditions. Approximately 62% of the participants received the main version of one of the programs (i.e., experimental conditions) in fifth grade and a follow-up booster program in seventh grade. The remaining 38% received the main version of one of the programs in seventh grade only.

**Information Only**

The first condition, Information About Consequences of Use (ICU), included four lessons about the social and health consequences of alcohol and other drugs. All of the interventions implemented in this study were developed at a time when providing information about the consequences of use was considered the standard school-based drug prevention strategy. Therefore, it served as the "treatment as usual" comparison group in AAPT.

**Resistance Training**

The second condition, Resistance Training (RT), contained four lessons about consequences of using substances and five lessons to provide adolescents with the behavioral skills necessary to refuse active social pressures (explicit drug offers). For example, resistance training curricula included lessons covering the common types of social pressure such as friendly teasing, tricks, dares, lies, and silent pressure. Techniques to say no, assertiveness and refusal practice, reports of personal resistance experiences, and parent-child interviews about peer and media pressure were also covered. Student commitments to resist pressure to drink alcohol were videotaped (see Hansen, Graham, Wolkenstein, & Rohrbach, 1991).
**Normative Education**

The third condition, Normative Education (Norm), contained four lessons about consequences of use plus five lessons to combat the influence of passive social pressures by correcting erroneous perceptions about the prevalence and acceptability of adolescent substance use among peers and by establishing conservative group norms. Sample lessons included a survey and discussion about the prevalence of alcohol use among students, an exercise on class opinions about alcohol use, homework to interview a parent about appropriate and inappropriate uses of alcohol, a class discussion of appropriate and inappropriate uses of alcohol, homework to interview a nondrinker, a lesson on developing positive friendships that include nondrinking as a positive quality, and videotaped rap songs and personal opinion statements (Hansen et al., 1991).

**Combined Condition**

The fourth condition, (Combined) included three lessons about the consequences of use, three and one-half lessons on resistance skills, and three and one-half lessons establishing conservative norms. The table that follows provides a summary of the AAPT experimental design.

<table>
<thead>
<tr>
<th>Resistance Training</th>
<th>Normative Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Information Only (ICU)</td>
</tr>
<tr>
<td>Yes</td>
<td>Information + Resistance Training (RT)</td>
</tr>
</tbody>
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**Participants**

Participants were 11,995 students (53% female and 47% male) from 130 school units (52% attending public schools and 48% attending private Catholic schools) in Los Angeles, Orange, or San Diego County. The sample consisted of 45% European American students, 37% Hispanic students, 13% Asian students, 3% African American students, and 2% were identified in other ethnic groups. Each student participated in one of four AAPT experimental conditions. Each study presented below is based on a sub-sample of the AAPT participants.

**Measures**

Participants were assessed on a yearly basis from the 5th through the 12th grades. The measured variables were relevant to each of the programs. Key findings summarized in this chapter those related to alcohol use, cigarette use, marijuana use, refusal skills, estimates of the prevalence of alcohol and drug use, and beliefs about the acceptability of drug use among the peer group. In a prevention trial of this magnitude there is an enormous amount of complexity around measures completed and which students were included in each analysis. These issues were dealt with in great detail in several original studies summarized and referenced below.
Summary of Findings

The first evaluation study focused largely on the effectiveness of the resistance training and normative education programs delivered in the public schools (Hansen & Graham, 1991). This initial study showed that normative education prevented the onset of adolescent alcohol, cigarette, and marijuana use one year after the program was delivered, whereas resistance training did not demonstrate any prevention program effects.

A subsequent study was undertaken to examine the programs over a longer time period and to probe why the resistance skills training appeared ineffective (Donaldson, Graham, & Hansen, 1994). This study revealed that normative education changed beliefs such that drug use was seen to be less acceptable to the peer group and prevalence estimates were lower. This subsequently led to lower alcohol, cigarette, and marijuana use in the eighth and ninth grades. In contrast, resistance training did improve refusal skills, but refusal skills did not lead to lower rates of alcohol, cigarette, and marijuana use in the eighth and ninth grades. Furthermore, this pattern of results was virtually the same for boys and girls, for participants of different ethnic backgrounds, in the public and private Catholic schools, and for high-risk participants.

The consistent finding that refusal skills did not predict subsequent substance use cast doubts about this most popular drug prevention approach. Other intervention studies in the early 90's were coming to similar conclusions, and scientific evaluations of Project D.A.R.E. (Drug Abuse Resistance Education) suggested that teaching refusal skills does not prevent
drug abuse (Ennett, Tobler, Ringwalt, & Flewelling, 1994). Fortunately, the AAPT data allowed us to take a closer look at the effects of resistance education.

Some research suggests that prevention programs can be differentially effective on the basis of participant characteristics and contextual factors. Traditional analyses based on all adolescents in a prevention program may fail to detect important subgroup differences. Most resistance training programs are based on the assumption that adolescents believe alcohol and drug use is unacceptable among the peer group. Therefore, teens do not necessarily want to try or begin using alcohol or drugs. This perspective suggests that the only problem is that students lack the skills to refuse alcohol and drug offers. Therefore, it seemed plausible that developing refusal skills might only be valuable for deterring the onset of drug use for those adolescents who believed use is not acceptable.

Another plausible reason for the failure of resistance skills training is that "just say no" training might have unintended negative effects that would offset the benefits of gaining skills. For example, resistance training may increase perceptions that drug use is prevalent. Telling teens they have to have skills to resist peer pressure presupposes that there will be pressure and offers to use alcohol and other drugs - perhaps more pressure than they would have otherwise thought. In other words, training to resist peer pressure may increase beliefs that alcohol and drug use are common and acceptable. This is the opposite message from what is intended through normative education.

Donaldson, Graham, Piccinin, & Hansen (1995) found both of these explanations were supported by the AAPT data. Refusal skills were found to predict lower alcohol use for those students who did not intend to drink alcohol. This suggests that resistance education may be an effective strategy if basic program assumptions are met. Specifically, peer pressure resistance skills training may benefit adolescents who already believe that drug use is deviant and unusual and who are motivated to avoid exposure to alcohol and drugs.

The second explanation was also supported. Those students who received only resistance skills training actually had higher prevalence estimates than did students who
received any of the other programs, including those who received only information about the consequences of using alcohol. It is important to note that this harmful effect did not occur when resistance skills were delivered in combination with normative education in the public schools.

**Implications for Practice**

The scientific evidence for the value of social influence-based prevention programs and the lessons learned from the Adolescent Alcohol Prevention Trial have important implications for educators working with these adolescent populations. First, we believe it is important to have realistic expectations about the purpose and goals of school-based prevention programs. If the goals are to prevent all adolescents from ever using alcohol and drugs and to entirely cure the Nation's drug problem, school-based prevention will probably prove disappointing. However, when the goal is to deter the onset of alcohol and drug use school-based prevention programs designed to combating negative social influences can be highly effective. They can delay the onset of drugs and keep a sizable sub-group of the population who might otherwise use drugs from doing so. These programs may also help students perform better in school, avoid the consequences of destructive problem behaviors, and to reduce the probability that students will progress on be addicted, problem users or abusers as older adolescents and adults.

One key to making social influence prevention efforts effective is to consider carefully student characteristics and existing social norms in the particular school context. First, when children reach early adolescence, they typically experience increased mobility and vulnerability. They struggle to achieve independence from parents and other adult authority figures. The social norms that guide much of their behavior shift from family norms to peer norms. In fact, in an effort to make this rather dramatic transition, they often rebel from prior norms and advice from adults. If new peer norms emerge which suggest that using alcohol and drugs is acceptable and "cool" behavior, the pressures to use can overwhelm all but the most persuasive educational efforts. It is in those situations that normative education programs, which use actual peers as part of the training to correct these false beliefs (versus adult authority figures such as teachers, parents, or police officers), appear most effective at delaying the onset of alcohol and drug use.

Teaching students skills to refuse alcohol and drug offers without addressing normative beliefs, may send a counterproductive message. During this transition period from childhood to adolescence, the "just say no" message in isolation may lead students to believe that the reason they are being taught to refuse alcohol and drug offers is because offers are, or soon will be, prevalent in their school environment. This of course, can stimulate their desire to conform to this presumably "normal" peer behavior. We believe that prevention approaches that use resistance training as part of their curriculum must also attempt to create or reinforce conventional beliefs about the prevalence and acceptability of alcohol and drug use. As shown in the AAPT, teaching resistance skills to combat "active" social pressures in combination with normative education to combat "passive" social pressures can be an effective prevention strategy.

Finally, we acknowledge there are school settings where it will not be possible to establish conventional social norms about alcohol and drug use. For example, in a setting where admired peers are clearly using alcohol and drugs, normative education efforts are likely to fail. Of course, the problem is that educators are no longer dealing with misperceptions about use, they are confronted with actual peer use. Different prevention approaches are called for under these conditions. Reviews of alternative social influence
prevention strategies can be found in Donaldson et al. (1996), Hansen, 1993, Hawkins, Catalano, & Miller (1992), and Sussman et al., 1995.

Conclusion

Intervention strategies based on sound evaluation research, and not just ideology, have great potential for ameliorating some of our most destructive social ills. Programs grounded in theories of social influence applied in the context of adolescent substance abuse prevention illustrate that potential. Teachers should seek to establish conventional norms among their students. This may require developing teaching skills different than many teachers are used to. Teachers should avoid preaching about norms as this rarely works. What is right and what constitutes the norm are different. Teachers should learn to listen to off-handed comments that may provide clues about errors in the perception of social norms among their students. Teachers should learn to set up activities in which conventional norms are naturally allowed to emerge from the group. Teachers should actively seek to reinforce conventional norms when they appear.

References


