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Risk Factors for Adolescent Alcohol and Drug Use/Abuse Prevention



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Young people in the United States have the highest rates of illicit drug use among industrialized countries, and tobacco and alcohol use remain alarmingly high (Higgins, 1988). For young people, alcohol and drug abuse interferes with their cognitive and emotional development, increases the chance of accidental injury and death, and magnifies the likelihood of drug dependency. For adults, drug abuse is associated with lung cancer, coronary heart disease, AIDS, violent crime, child abuse, and unemployment (Hawkins, Catalano, & Miller, 1992). While individuals bear tremendous costs of drug abuse in their personal lives, families, and jobs, society also pays a price in the high cost of such related services as health care, drug and alcohol treatment, law enforcement, and family supports.

This review identifies factors that increase the risk that young people will drink, smoke cigarettes, or use other drugs. Based on a growing body of research evidence, adolescent alcohol and drug use/abuse, like other youth problems, is influenced not by a single factor, but by many; furthermore, these factors are not confined to any one part of the adolescent's world. This review focuses on both risk factors (hazards that increase a youngster's vulnerability to alcohol and drug use/abuse) and protective factors (safeguards that enhance a youngster's ability to resist use and promote adaptation and competence). Given my interest in prevention, this review is intentionally limited to those risk factors amenable to intervention; thus, other factors, such as a family history of alcoholism, are omitted. For a more exhaustive review, the reader is directed to a recent paper by Hawkins, Catalano, and Miller (1992).

This review is unique in several ways. First, it focuses on both licit drugs, those that can be used legally by adults, (i.e. alcohol and cigarettes) and illicit drugs, those illegal at any age (i.e. marijuana and cocaine). Despite popular conceptions, tobacco and alcohol cause more personal harm and greater societal costs than other drugs (Higgins, 1988). Ironically, little attention is given to predictors of tobacco use, yet this is often the first drug on which adolescents become truly dependent, due to the highly addictive nature of nicotine. Furthermore, tobacco use may be overlooked because there are few, if any, short-term consequences, although the long-term consequences may be more deadly than other drugs (Newcomb & Bentler, 1989). Alcohol use may receive

more widespread public attention since its consequences are more immediate; alcohol- related accidents are the principal cause of death among the 15 to 24 age group (Higgins, 1988).

Second, the paper attempts to disentangle the power or potency of particular risk factors in predicting adolescent drug use/abuse. Even though the risk factors are listed according to different levels of the human ecology, many of them interrelate. The potency of particular risk factors in predicting adolescent drug use and the extent to which some risks magnify or mitigate others are noted in the summary of each section.

Third, this paper draws an important distinction, one that is often overlooked, between predictors of drug use and predictors of drug abuse. Practitioners interested in preventing drug abuse may target different risk factors in different developmental periods than those interested in preventing teen drug use.

Finally, the paper concludes by drawing implications of this risk-focused, ecological approach for designing effective community prevention programs. Selected programs are described to illustrate the breadth and diversity of successful prevention efforts.

This paper begins by summarizing recent evidence on the prevalence of drug use and then proceeds to discuss risk factors in individuals and in their families, peer groups, school and work settings, and the communities in which they reside.

PREVALENCE OF DRUG USE

While use of many drugs appears to be stabilizing or declining from the peak rates of 1979 and 1980, recent data suggests drug use is widespread and many would contend, unacceptable. According to the 1985 National Household Survey, smoking and drinking are the most prevalent activities among 12 to 17 year-olds (Newcomb & Bentler, 1989). Nationally, one-fifth of high school seniors smoke daily, while 35 to 40 percent are "binge" drinkers (Higgins, 1988). Similar trends are found in Wisconsin with 51 percent of seniors, 39 percent of sophomores, and 23 percent of eighth graders reporting they drank heavily (5 or more drinks in a row) during the previous month (Small, 1990). According to a 1991 study conducted by the Office of the Inspector General, over one-fourth of 7th to 12th graders drink on a weekly basis (Office of Substance Abuse Prevention, 1991). Nearly 30 percent of 7th to 12th graders have tried at least one illicit drug, primarily marijuana, during their lifetime (Newcomb & Bentler, 1989); the use of any drug other than alcohol, marijuana, or cigarettes, however, is low (Newcomb & Bentler, 1989).

Steady declines in drug use have been noted in the Monitoring the Futures studies since 1980. A couple exceptions include the lifetime prevalence of cocaine use and abuse (Newcomb & Bentler, 1989), and a return to the binge-rate highs of the late 1970's; over one-third of seniors binged at least once during the two weeks preceding the study (Higgins, 1988). Other studies indicate a disturbing decline in the age of first use of alcohol and other drugs (Higgins, 1988; Falco, 1988); the percentage of students who begin using drugs by the 6th grade has tripled in the last 10 years. Peer and social influences to drink begin as early as the fourth grade (Falco, 1988). As recently as 25 years ago, marijuana use was virtually nonexistent among 13 year-olds; now 1 in 6 thirteen-year-olds have used marijuana (Falco, 1988).

INDIVIDUAL RISK FACTORS

Alienation or Rebelliousness - Alienation or rebelliousness has been linked with early or frequent substance use (Baumrind, 1987; Hawkins, n.d.; Hawkins, Lishner, & Catalano, 1987). When kids exhibit a weak attachment to parents, low commitment to school, and nonconformity to community laws and norms, the chances of substance abuse increases (Botvin, 1985; Dryfoos, 1990; Hawkins, Lishner, & Catalano, 1987; Higgins, 1988).

Anti-Social Behavior - Boys, in particular, who are aggressive at ages 5, 6, and 7 have elevated risk of drug abuse later. For 4 to 15 percent of all young people, early anti-social behavior continues into adolescence; for about 40 percent of these, frequent drug use persists into adulthood (Hawkins, Lishner, & Catalano, 1987). Early anti-social behavior is a more potent predictor of substance use when it occurs in combination with isolation, withdrawal or hyperactivity (Hawkins, n.d.).

Anxiety or Depression - Anxiety and depression are related to greater drug use (Botvin, 1985; Dryfoos, 1990; Higgins, 1988; Kandel, Kessler, & Margulies, 1978; Steinberg, 1991), but the effects appear limited to early adolescence. Panic attacks and depressive symptoms appear to trigger drug use before age 15, but have little effect on use that begins between the ages of 15 and 25 (Robins & Przybeck, 1987).

Early First Use of Drugs - The earlier kids have their first drug experience, the more likely they will have problems later in adolescence (Dryfoos, 1990; Hawkins, n.d.; Hawkins, Lishner, & Catalano, 1987; Hawkins, Lishner, Jenson, & Catalano, 1987; Higgins, 1988). Overall, about 8 percent of male users and 4 percent of female users develop severe dependence; when use begins before age 15, however, the rates are 6 to 10 times higher with 50 percent of men and 40 percent of women developing drug dependency (Higgins, 1988; Robins & Przybeck, 1987).

External Locus of Control - Adolescents who perceive that their lives are largely beyond their control are more apt to abuse substances than their peers who feel that they have a large measure of control over their lives. Adolescents who believe their lives are controlled by external forces feel more pessimistic about their chances for future success, and less competent and capable of choosing and shaping their own destinies (Botvin, 1985; Hawkins, Lishner, & Catalano, 1987; Newcomb & Bentler, 1989; Steinberg, 1991).

Favorable Attitudes Toward Drinking - Favorable attitudes toward drinking or, at a minimum, fewer unfavorable attitudes, increase the risk of drug abuse (Hawkins, n.d.). An important consideration from a preventive perspective is that the earlier these favorable attitudes develop, the less likely kids will have the physical, cognitive, and psychosocial maturity to avoid negative consequences.

Lack of Religious Commitment - Religious beliefs protect children from involvement in drug abuse (Hawkins, Lishner, & Catalano, 1987; Hawkins, Lishner, Jenson, & Catalano, 1987; Higgins, 1988). Regardless of denomination or socioeconomic standing, faith gives children a belief that their lives have meaning and the confidence that things will work out despite hard times.

Sensation-Seeking or High Need for Excitement - Drug-abusing kids tend to be risk-takers who have a high need for stimulation or excitement (Hawkins, Lishner, Jenson, & Catalano, 1987; Higgins, 1988; Newcomb & Bentler, 1989). This suggests that healthy alternatives to drugs may need to be high sensation activities that provide an element of danger to replace the kick that alcohol or drugs provide.

SUMMARY OF INDIVIDUAL RISK FACTORS

To understand the importance of these individual risk factors, one needs to contrast their influence with the influence of risk factors in other parts of the adolescents' world. Generally, with the exception of rebelliousness, alienation, and sensation-seeking, personality factors have been found to be less predictive of substance use than behavioral or interpersonal factors (Hawkins, Lishner, Jenson, & Catalano, 1987). Jessor and colleagues report that environmental factors are twice as important in predicting drug use as personality factors (cited in Hawkins, Lishner, and Catalano, 1987).

Upon closer examination, however, the importance of these individual risk factors depends upon whether one is predicting adolescent experimentation with substances or abuse. For the typical teenager, drug experimentation occurs in social or peer settings, but the abuse or problem use of drugs is generated by internal distress, limited life opportunities, and unhappiness (Newcomb & Bentler, 1989); in other words, the evidence suggests that kids use drugs for social reasons, but abuse drugs to cope with stress, loneliness, boredom, anti-social behavior, family conflict, school failure, or other personal or social problems (Hawkins, Lishner, & Catalano, 1987).

Furthermore, factors associated with early or late initiation into drugs often differ from those associated with more normative initiation into drug use. Most substance use that begins between the ages of 15 and 24 appears related to social influences. Drug use that begins early (before age 15) or abnormally late (late 20s), however, is closely related to psychological disturbances (Robins & Przybeck, 1987) and anti-social acts (Hawkins, Lishner, & Catalano, 1987; Newcomb & Bentler, 1989; Robins & Przybeck, 1987). Thus, the risk factors for early use are also the risk factors for heavy use and, therefore, for abuse (Newcomb & Bentler, 1989).

In summary, situational and interpersonal factors are most important for initiation into the use of drugs; psychological factors are most important for abnormally early or late use, increased involvement in that behavior, or escalation to illicit drugs (Kandel, et al., 1978; Robins & Przybeck, 1987).

FAMILY RISK FACTORS

Adapting to Divorce, Remarriage, or a Marked Worsening of Family Relations - Youngsters who undergo family transitions often experience temporary psychological difficulties which may be associated with increased substance use (Steinberg, 1991).

Distant, Uninvolved, and Inconsistent Parenting - In general, studies suggest that authoritative parenting is associated with lower rates of substance abuse than autocratic, permissive or uninvolved parenting (Baumrind, 1987; Dryfoos, 1990; Hawkins, n.d.; Hawkins, Lishner, & Catalano, 1987; Kandel, et al., 1978; Newcomb & Bentler, 1989; Steinberg, 1991). Authoritative parenting is a constellation of parenting characteristics that include warmth and responsiveness as well as moderate to high levels of control; control is defined as firm and consistently enforced rules and standards for the child's behavior.

Negative Parent/Child Communication - One aspect of parenting that appears particularly important to substance abuse is negative communication patterns between parents and their adolescents (Dryfoos, 1990; Hawkins, Lishner, & Catalano, 1987; Newcomb & Bentler, 1989).

Poor Parental Monitoring - Poor parental monitoring is a powerful predictor of substance abuse (Baumrind, 1987; Dryfoos, 1990; Hawkins, n.d.; Hawkins, Lishner, & Catalano, 1987; Kandel, et al., 1978; Newcomb & Bentler, 1989; Patterson & Southamer-Loeber, 1984; Steinberg, 1991). Knowing where teens are, what they are doing and who they are with may be especially important in the after-school hours; one study linked unsupervised after-school time to substance use and abuse (Richardson, Dwyer, McGuigan, Hansen, Dent, Johnson, Sussman, Brannon, & Phil, 1989).

Unclear Family Rules, Expectations, and Rewards - Youth are more apt to get involved in alcohol use when parents are tolerant of children's use (Hawkins, n.d.) and when there are few or inconsistent rewards for nonuse (Hawkins, Catalano, & Miller, 1992).

Parent or Sibling Drug/Alcohol Use - When parents or siblings are heavy users of alcohol or recreationally use illegal drugs, youth are more apt to use substances as well (Baumrind, 1987; Hawkins, Lishner, & Catalano, 1987; Hawkins, Lishner, Jenson, & Catalano, 1987; Newcomb & Bentler, 1989). For example, a household which includes one cigarette smoker doubles the likelihood that a teen will smoke or expect to smoke (Hawkins, Catalano, & Miller, 1992). Modeling of drug use by siblings appears to be a better predictor of a younger brother's use than parental use (Hawkins, Catalano, & Miller, 1992). But parents who involve their children in drug use (i.e. asking their child to get them a beer or to light a cigarette) increase the likelihood that teens will use or abuse drugs (Hawkins, Catalano, & Miller, 1992).

SUMMARY OF FAMILY RISK FACTORS

Family factors appear especially important in the early initiation to drug use and the initiation to illicit drugs other than marijuana. Family factors, while important throughout childhood and adolescence, may be especially important in shaping early development which, in turn, may serve to protect against early onset of substance abuse (Falco, 1988). For initiation into illicit drugs other than marijuana, parental influences, especially parent/child relations, emerge as the dominant influence.

Parent education may be most effective as a preventive measure if it is tailored to the developmental needs of children and adolescents. During the preschool and early elementary years, parents need skills to reduce children's early conduct problems and to build close relationships with their children; in the middle elementary grades, parents need the know-how to promote academic achievement among their offspring; in the elementary and junior high school years, parents need to develop competencies to help their children recognize and resist social influences to use alcohol and other drugs (Hawkins, Lishner, Jenson, & Catalano, 1987; Hawkins & Catalano, 1990).

PEER RISK FACTORS

Associating With Peers Who Use Drugs - Kids who associate with other kids who use drugs have a much greater likelihood of using drugs themselves. Interestingly, negative peer pressure is a risk whether or not other risk factors are present (Hawkins, n.d.). For example, even if kids come from well-managed families, are getting good grades in school, and live in a well-connected neighborhood, they are more apt to use drugs if their friends do. Hawkins (n.d.) points out, however, that kids with fewer risk factors are less likely to hang out with other kids who use drugs unless everyone in the school is using.

The choice of friends, however, is not entirely random. Adolescents are not merely passive recipients of peer influence but, in fact, select some friends over others (Steinberg, 1991). While it is true that adolescents increase their drug use if they associate with drug-using friends, adolescent's own beliefs about drug use may influence their choice of whom to associate with (Kandel, et al., 1978).

Perceived Use of Substances by Others - Adolescents are more likely to drink or use drugs if they believe rates of drinking or drug use are high among their peers (Bush & Iannotti, 1987; Hawkins, Lishner, & Catalano, 1987; Hawkins, Lishner, Jenson, & Catalano, 1987; Kandel, et al., 1978). Substance use is more closely related to what teenagers believe friends do than what is actually going on. Unfortunately, teens often overestimate the number of peers who drink (Steinberg, 1991). This suggests a prevention strategy of allowing opportunities for adolescents to hear directly from their peers just how inflated their estimates of peer drug use may be.

SUMMARY OF PEER RISK FACTORS

According to Hawkins and Catalano (1990), the two risk factors that are the strongest predictors of adolescent drug use are early initiation and having friends who use drugs. Granted, peers take on added importance during adolescence, but the influence of peers supplements rather than replaces the importance of the family and other influences on adolescent development such as the school. For example, adolescent attachment or bonding to family and school is an important influence on their choice of friends; when kids feel close to parents and find school interesting and meaningful, they are less apt to associate with drug-using peers, unless everyone in the school uses drugs (Hawkins, n.d.).

SCHOOL RISK FACTORS

Academic Failure - Academic failure increases the risk of drug abuse but, conversely, drug abuse also increases the risk of academic failure (Dryfoos, 1990; Hawkins, n.d.; Hawkins, Lishner, & Catalano, 1987; Hawkins, Lishner, Jenson, & Catalano, 1987; Higgins, 1988; Newcomb & Bentler, 1989). Academic failure appears to be especially important in the late elementary grades; youth who are failing in grades 4, 5, and 6, for whatever reason, are more apt to get involved in drug abuse during high school (Hawkins, n.d.; Hawkins, Lishner, & Catalano, 1987). Drug abuse is also associated with skipping school (Dryfoos, 1990; Hawkins, Lishner, Jenson, & Catalano, 1987).

Low Commitment to School - Students who hate school, who attend only so they can hang out with friends and smoke cigarettes, who lose their commitment to being a student and getting an education, are at elevated risk for problems in adolescence (Hawkins, n.d.).

Low commitment to school may be due, in part, to school size. Large schools offer more nonacademic activities, but extra-curricular participation per person is only about half as much as in smaller schools (Barker & Gump, 1964). In large schools, academically marginal students often feel unneeded, like outsiders; they rarely get involved in school activities. In small schools, however, these students feel a sense of involvement and obligation equal to that of more academically successful students.

School Transitions - When students move from an elementary school to a junior-high school or middle school, academic achievement goes down, extracurricular participation goes down, feelings of being anonymous go up, and rates of drug use and drug abuse increase (Carnegie Council, 1989; Hawkins, n.d.; Hawkins, Lishner, Jenson, & Catalano, 1987; Simmons, Burgeson, Carolton-Ford, & Blyth, 1987; Steinberg, 1991). The timing of school transitions appears important with negative consequences more likely the earlier the transition occurs in a child's life, and when it occurs in conjunction with several other life changes. Students most susceptible to the negative effects of school transitions include marginal students, those who lose friends during the transition, or those experiencing other problems (Simmons, Blyth, Van Cleave, & Bush, 1979; Simmons, et al., 1987; Steinberg, 1991).

Teaching Practices - Hawkins (n.d.) suggests that classroom teaching practices can result in improved academic achievement, higher commitment to school, and lower rates of suspension and expulsion. One practice that appears to be especially important is proactive classroom management--providing clear expectations, consequences for failing to meet expectations, and rewards for achieving them. By using this type of classroom management, teachers are more able to maintain control in the classroom and to tailor the teaching to children of

all ability levels. Another teaching practice, cooperative learning, organizes students into small groups, thereby harnessing peer pressure to enhance learning.

WORK RISK FACTORS

Long Work Hours - Working long hours places average youngsters "at-risk" for drug and alcohol abuse. For freshmen and sophomores, working in excess of 15 hours per week places youngsters at greater risk, while for juniors and seniors, working in excess of 20 hours a week or more is problematic (Steinberg, 1991). In a recent study in Wisconsin, Small reports that the majority of 11th and 12th graders are regular users of alcohol; those who work more than 20 hours per week, however, drink more often and consume more on each occasion (Bogenschneider, Small, & Riley, 1990).

COMMUNITY RISK FACTORS

Complacent or Permissive Community Laws and Norms - Adolescents respond to adult messages, being more likely to use substances acceptable to the community than those strongly disapproved of by the community (Baumrind, 1987). Therefore, adolescents are more apt to use substances in the context of permissive, complacent, or inconsistent laws, school and work place policies, and community norms. Clear statements, such as higher rates of taxation, decrease the rate of alcohol usage among both light and heavy users. Raising the drinking age from 18 to 21 reduces alcohol usage, but is not as effective as taxation among heavy users (Hawkins, n.d.; Higgins, 1988).

Drug Availability - Drug availability is clearly related to use (Hawkins, n.d.; Higgins, 1988; Newcomb & Bentler, 1989). Hawkins (n.d.) reports that in schools where students perceive there are more drugs available, higher rates of drug use occur. Control of the supply of drugs probably has the greatest effect on the behavior of youngsters who have never used or who are early experimenters (Falco, 1988); early users are most often introduced to unhealthy substances by trusted adults (Hawkins, n.d.).

Lack of Concerted Law Enforcement - While it is true that society will never be able to eliminate the supply of alcohol to underage drinkers, limiting supply remains an important strategy because it communicates the norms and beliefs of society and establishes the boundaries of socially sanctioned behavior (Hawkins, n.d.; Higgins, 1988). For example, when violators are busted for selling booze to minors, other people hear of it and are less likely to do it.

Lack of Meaningful Roles - As young people mature, they desire new rights, privileges, and responsibilities, many which are reserved for adults. In contemporary society, young people are permitted few opportunities to participate in legitimate government and community roles; instead, they search for other symbols of adulthood such as alcohol or sexuality, which some contend are the only tastes of adulthood available to young people. While empirical support for this argument is sparse, substance use does drop off markedly when young people enter responsible roles such as marriage and parenthood (Steinberg, 1991).

Lack of Clarity Regarding Adolescent and Adult Status - The scarcity of meaningful roles that confer adult status is exacerbated by the lack of clarity regarding when adolescents become adults; few formal ceremonies or rites of passage other than religious ceremonies like confirmation or graduation, mark the transitions from childhood into adolescence or adolescence into adulthood (Steinberg, 1991). This haziness about when an adolescent becomes an adult also blurs the issue of when adolescent alcohol use is appropriate; this, in turn, contributes to a lack of consistent norms regarding drug use (Higgins, 1988).

Low Neighborhood Attachment and Community Disorganization - The risk of youth involvement in substance abuse increases under conditions of low neighborhood attachment (Hawkins, n.d.; Hawkins, Lishner, Jenson, & Catalano, 1987). Low neighborhood attachment means that community residents have little connection to others in the neighborhood, parents don't talk to each other, and few community norms exist regarding such issues as curfews and drinking. This community disorganization can occur in middle and upper-middle class neighborhoods as well as lower socioeconomic settings.

Communities marked by low quality housing and high levels of disorganization—vandalism, broken windows, and unoccupied dwellings—experience higher levels of drug abuse. Mobility is also associated with higher rates of drug-related problems, evoking the greatest harm among the transient and those who lack the socioeconomic resources and skills to integrate into new communities (Hawkins, n.d.; Hawkins, Lishner, Jenson, & Catalano, 1987).

Low Socioeconomic Status - Regular use of illicit drugs is more prevalent under conditions of extreme social and economic deprivation (Hawkins, Lishner, Jenson, Catalano, 1987; Newcomb & Bentler, 1989; Steinberg, 1991). Risk factors are often correlated so being poor increases the probability that other risks will be present and also, magnifies the adverse impact of these risk factors that exist.

SUMMARY OF SCHOOL, WORK, AND COMMUNITY RISK FACTORS

Few prevention programs focus on the spectrum of childhood predictors of adolescent drug use and abuse. Individual and family factors are most often addressed with less attention given to school, work, or community factors. Furthermore, since individuals engage in drug use for a variety of reasons, no single prevention approach is likely to be effective (Battjes & LaRue Jones, 1987).

PROTECTIVE FACTORS

Why is it that some teens use and abuse alcohol and other drugs, while others face many of these same life circumstances and avoid early use and abuse? What's right with these teens? What protects them? What factors serve as safeguards from these life events and enhance a youngster's ability to adapt and grow into a competent, responsible adult?

Even though the research on risk factors for teen alcohol and drug use/abuse is well-developed and consistent, few studies have focused exclusively on protective factors. In their summary of this literature, Hawkins and Catalano (1990) identify the following factors that promote adaptation and competence.

Clear Rules and Expectations

If societal rules, norms, and policies are clear-cut and explicit, youngsters are less apt to initiate drug use. Clear rules include explicit limits in families, written and consistently enforced policies in schools, and clear norms and standards of behavior in communities.

Meaningful Roles for Youth so They can Bond or Build Connections to Family, School, and Community

Even if the norms are clear, teens need the motivation to abide by the norms and policies of the community. Bonding or emotional ties to family, school, and community provide the incentive or internal motivation to follow family rules, school and work place policies, and community norms. For youngsters to become bonded to their family, school or community requires three conditions: opportunities for involvement, the skills necessary to be successful in this involvement, and a consistent system of rewards and recognition when they are (Hawkins & Catalano, 1990).

Opportunities to Learn the Skills to Resist Negative Peer Pressure

Even when teens have clear rules and the motivation to abide by them, they need the skills to resist a powerful influence on their behavior--negative peer pressure (Hawkins & Catalano, 1990). One of the most successful prevention programs has been teens teaching younger peers how to say no to sex, smoking, and to a lesser extent, alcohol (Botvin, 1985; Howard & McCabe, 1990).

Alternative Youth Activities

Finally, we can give youth the skills to resist negative peer pressure, but we can also give them an alternative to fill the void if they do not drink (Blyth & Roehlkepartain, 1992). When we try to extinguish one behavior, we are much more likely to be successful if we provide an opportunity to engage in another behavior. For example, people who quit smoking often substitute gum chewing. Having other options available also decreases the amount of negative peer pressure that adolescents must resist.

IMPLICATIONS FOR PREVENTION

According to a risk-focused, ecological approach, the more risk factors and the fewer protective factors, the greater the danger of youth involvement in potentially problematic behaviors. Research on youth problems indicates that one risk factor alone isn't likely to put a child at risk. But two or more--a combination of a dysfunctional family and a lot of negative peer pressure, for example--can put a child in jeopardy (Hawkins, Lishner, Jenson, & Catalano, 1987; Higgins, 1988; Newcomb, Maddahian, & Bentler, 1986; Rutter, 1979). More specifically, the presence of two risk factors elevates the chances of problem behaviors four times, and four risk factors escalate the risk by as much as 20 times (Rutter, 1979). More risk factors mean greater danger. Thus, prevention effort with the greatest chances for success identify and minimize multiple risks in several levels of the human ecology.

Yet prevention programmers often search for single factors and simple solutions to complex problems like adolescent alcohol and other drug use. Unfortunately, there are no magic bullets; if prevention efforts are to have any hope of success, they need to be comprehensive and multi-dimensional, reducing risk factors and promoting protective factors in diverse parts of the child's world.

Many prevention programs have been developed to address many of these risk and protective factors, more so for adolescent drug and alcohol use/abuse than other youth problems. While this listing is not intended to be exhaustive, it does serve to alert the reader to the breadth and diversity of prevention programs that have successfully reduced risk factors and bolstered

protective factors related to adolescent alcohol and drug use (See also Hawkins, Catalano, Barnard, Gottfredson, Holmes, and Miller, 1992 and Hawkins, Catalano, and Miller, 1992).

At the individual and peer levels, for example, Botvin and Tortu (1988) have designed a prevention program for junior high school students that has documented effectiveness in reducing new cigarette smoking, excessive alcohol use, and marijuana use. Life Skills Training increases self-esteem, sense of personal control and self-mastery, assertiveness, self-confidence, health knowledge, and negative attitudes toward substance use. Similar or even more promising results are obtained when the program is taught by peer leaders as teachers. The program has received the New York State Governor's Award for Excellence in Health Education, has been selected as an exemplary prevention program by the National Centers of Disease Control, and was selected as one of 14 outstanding prevention programs by the American Psychological Association's Task Force on Prevention.

Shure and Spivack (1988) have developed a prevention program, Interpersonal Cognitive Problem Solving (ICPS), to address the risk factor of early anti-social behavior. Children trained for at least a 4-month period were less impulsive, aggressive, impatient, and engaged in fewer temper tantrums. Children also exhibited more concern for each other. These gains were maintained at the one and two-year follow-up. This program was also selected as one of 14 outstanding prevention programs by the American Psychological Association's Task Force on Prevention.

At the family level, Hawkins and Catalano have developed a parent education program, "Preparing for the Drug-Free Years" for parents of children ages 9 to 12 to reduce the risk that children will develop an alcohol or drug problem (Hawkins, Catalano, Brown, Vadasy, Roberts, Fitzmahon, Starkman, & Ransdell, 1988). The program addresses the factors of parental attitudes toward drug use, friends who use drugs, ineffective family management practices, low degree of bonding to family, and early first use of drugs. Evaluations suggest that participants learn skills and practices associated with lower risk of drug use (Hawkins, Catalano, Barnard, Gottfredson, Holmes, & Miller, 1992).

Talking With Your Kids About Alcohol (TWYKAA) is a family-level program to help parents increase abstinence, delay age of onset, and decrease children's risk of future alcohol problems, especially health problems such as alcoholism and motor vehicle accidents. Parents are alerted to the messages their children receive from such sources as peers and the media. Parents also learn persuasive communication skills and specific resistance techniques that can be taught to their children. Evaluations demonstrate that parents reduce their alcohol consumption after going through the program followed by reductions in their children's drinking within six months (Prevention Research Institute, n.d.).

At the school level, prevention researchers have developed the School Transitional Environment Project (STEP) to help young people adjust to school transitions (Felner & Adan, 1988). To create a more stable environment, STEP creates schedules in which the same group of students takes most courses together. Regular one-on-one meetings with homeroom teachers give students the personal attention they need. Designating a part of the building for younger grade levels alleviates a major concern of many new students who feel intimidated by older children. In a study in a large urban high school, control students showed declines in grades and increases in absenteeism when they entered high school, while the STEP students showed no such effects. STEP students perceived the school as more stable, well-organized, and supportive than control students.

While efforts to address many risk and protective factors require formal programs such as those just described, others do not. For example, communities have encouraged stricter enforcement of drinking laws, developed student assistance programs, established parent networks, sponsored alternative youth activities, removed alcohol from family picnics, and provided meaningful roles for young people.

In any given community, some of these programs and efforts may be more important than others (Bogenschneider, et al, 1990). Thus, communities need to assess which of these supports for averting youth alcohol and other drug use are in place and which are missing so programming can be directed toward local needs (Bogenschneider, et al., 1990).

As important as identifying the prevention strategies most needed in the community is targeting the most appropriate developmental age. Intervening early before negative behaviors begin to crystallize increases the chances that efforts will be successful. Finally, the potential consequences of any prevention effort should be considered carefully. No matter how well-intentioned, any intervention that is powerful enough to change behavior to produce a beneficial outcome could also have an unwanted (and usually unforeseen) adverse effect (Shaffer, Philips, Garland, & Bacon, 1989).

CONCLUSION

According to this risk-focused ecological approach, prevention of youth problems requires a comprehensive, multi-dimensional approach that focuses on family dynamics, school performance, community rules and expectations, and the development of individual social skills and coping strategies. To promote healthy development and encourage wise and responsible decisions regarding alcohol and other drug use by young people, we need to put our energies into reducing or eliminating risk factors, and enhancing and creating the many conditions that can protect and support youth.

REFERENCES

- Barker, R. G., & Gump, P. V. (1964). *Big school, small school: High school size and student behavior*. Stanford: Stanford University Press.
- Battjes, R. J., & LaRue Jones, C. (1987). *Implications of etiological research for preventive interventions and future research*. National Institute on Drug Abuse Monograph 56. (DHHS Publication No. ADM 87-1335). Washington, DC: U. S. Government Printing Office.
- Baumrind, D. (1987). *Familial antecedents of adolescent drug use: A developmental perspective*. National Institute on Drug Abuse Monograph 56. (DHHS Publication No. ADM 87-1335). Washington, DC: U. S. Government Printing Office.
- Blyth, D. A., & Roehlkepartain, E. G. (1992). Working together: A new study highlights what youth need from communities. *Source*, 8(2). Minneapolis, MN: Search Institute.
- Bogenschneider, K., Small, S., & Riley, D. (1990, September). *An ecological risk-focused approach for addressing youth-at-risk issues*. Chevy Chase, MD: National 4-H Center.
- Botvin, G. J. (1985). *Prevention of adolescent substance abuse through the development of personal and social competence*. In *Preventing adolescent drug abuse: Intervention strategies*. National Institute on Drug Abuse Monograph 47. (DHHS Publication No. ADM 85-159663). Washington, DC: U.S. Government Printing Office.
- Botvin, G. J., & Tortu, S. (1988). Preventing adolescent substance abuse through life skills training. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), *14 Ounces of Prevention: A casebook for practitioners*. Washington, DC: American Psychological Association.
- Bush, P. J., & Iannotti, R. (1987). *The development of children's health orientations and behaviors: Lessons for substance use prevention*. National Institute on Drug Abuse Monograph 56. (DHHS Publication No. ADM 87-1335). Washington, DC: U. S. Government Printing Office.
- Carnegie Council on Adolescent Development Task Force on Education of Young Adolescents (1989). *Turning points: Preparing American youth for the 21st century*. New York: Carnegie Corporation.
- Dryfoos, J. G. (1990). *Adolescents at risk*. New York: Oxford University Press.

- Falco, M. (1988). *Preventing abuse of drugs, alcohol, and tobacco by adolescents*. New York: Carnegie Council on Adolescent Development.
- Felner, R. D., & Adan, A. M. (1988). The school transitional environment project: An ecological intervention and evaluation. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), *14 Ounces of Prevention: A casebook for practitioners*. Washington, DC: American Psychological Association.
- Hawkins, D. (n.d.). *Risk-focused prevention: Prospects and strategies*. Invited lecture at the Coordinating Council on Juvenile Justice and Delinquency Prevention.
- Hawkins, J. D., & Catalano, R. F. (1990). *How the experts answer the 20 most asked questions about risks for drug abuse*. [audiotape]. Washington, DC: Developmental Research & Programs.
- Hawkins, J. D., Catalano, R. F., Barnard, K. E., Gottfredson, G. D., Holmes, A. B., IV, & Miller, J. Y. (1992). *Communities that care: Action for drug abuse prevention*. San Francisco, CA: Jossey-Bass, Inc.
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, *112*(1), 64-105.
- Hawkins, J. D., Catalano, R. F., Brown, E. O., Vadasy, P. F., Roberts, C., Fitzmahon, D., Starkman, N., & Ransdell, M. (1988). *Preparing for the drug (free) years: A family activity book*. Seattle, WA: Comprehensive Health Education Foundation.
- Hawkins, J. D., Lishner, D. M., & Catalano, R. F. (1987). *Childhood predictors and the prevention of adolescent substance abuse*. National Institute on Drug Abuse Monographs 56, (pp. 75-126). (DHHS Publication No. ADM 87-1335). Washington, DC: U. S. Government Printing Office.
- Hawkins, J. D., Lishner, D. M., Jenson, J. M., & Catalano, R. F. (1987). *Delinquents and drugs: What the evidence suggests about prevention and treatment programming*. National Institute on Drug Abuse. (DHHS Publication No. ADM 87-1537). Washington, DC: U. S. Government Printing Office.
- Higgins, P. S. (1988). *The prevention of drug abuse among teenagers: A literature review*. St. Paul, MN: Amherst H. Wilder Foundation.

- Howard, M., & McCabe, J. B. (1990). Helping teenagers postpone sexual involvement. *Family Planning Perspectives, 22*, 21-26.
- Kandel, D. B., Kessler, R. C., & Margulies, R. Z. (1978). Antecedents of adolescent initiation into states of drug use: A developmental analysis. In D. B. Kandel (Ed.), *Longitudinal research and drug use: Empirical findings and methodological issues* (pp. 73-98). Washington, DC: Hemisphere.
- Newcomb, M. D., & Bentler, P. M. (1989). Substance use and abuse among children and teenagers. *American Psychologist, 44*, 242-248.
- Newcomb, M. D., Maddahian, E., & Bentler, P. M. (1986). Risk factors for drug use among adolescents: Concurrent and longitudinal analyses. *American Journal of Public Health, 76*, 525-531.
- Office of Substance Abuse Prevention (1991). News from OSAP and ADAMHA. *Prevention Pipeline, 4*(3), 1.
- Patterson, G. R., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. *Child Development, 55*, 1299-1307.
- Prevention Research Institute (n.d.). *An introduction to the Prevention Research Institute*. Lexington, KY: Prevention Research Institute.
- Richardson, J. L., Dwyer, K., McGuigan, K., Hansen, W. B., Dent, D., Johnson, C. A., Sussman, S. Y., Brannon, B., & Phil, B. F. (1989). Substance use among eighth grade students who take care of themselves after school. *Pediatrics, 84*, 556-566.
- Robins, L. N., & Przybeck, T. R. (1987). *Age of onset of drug use as a factor in drug and other disorders*. National Institute on Drug Abuse Monograph 56 (pp. 178-192). (DHHS Publication No. ADM 87-1335). Washington, DC: U. S. Government Printing Office.
- Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Primary prevention of psychopathology: Social competence in children, 3*, (pp. 49-74). Hanover, NH: University Press of New England.
- Shaffer, D., Philips, I., Garland, A., & Bacon, K. (1989). Prevention issues in youth suicide. In D. Shaffer, I. Philips, N. B. Enzer, & M. M. Silverman (Eds.), *Prevention of mental disorders, alcohol and other drug use in children and adolescents*. OSAP Prevention Monograph-2 (pp. 443-456). Rockville, MD: Office for Substance Abuse Prevention.

- Shure, M. B., & Spivack, G. (1988). Interpersonal cognitive problem solving. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), *14 Ounces of Prevention: A casebook for practitioners*. Washington, DC: American Psychological Association.
- Simmons, R. G., Blyth, D. A., Van Cleave, E. F., & Bush, D. M. (1979). Entry into early adolescence: The impact of school structure, puberty, and early dating on self-esteem. *American Sociological Review*, *44*, 948-967.
- Simmons, R. G., Burgeson, R., Carlton-Ford, S., & Blyth, D. A. (1987). The impact of cumulative change in early adolescence. *Child Development*, *58*, 1220-1234.
- Small, S. (1990). *Unpublished data*.
- Steinberg, L. (1991). *Adolescent transitions and alcohol and other drug use prevention*. *Preventing adolescent drug use: From theory to practice*. Office of Substance Abuse Prevention Monograph-8, (pp. 13-51). Washington, DC: U. S. Department of Health and Human Services.

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