What Youth Need to Succeed: The Roots of Resiliency

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A dolescence is an age of promise, but also a time of risk (Lerner, 1995; McCord, 1990; Newcomb, Maddahian, & Bentler, 1986). Almost half of America's youth aged 10 to 17 are estimated to abuse alcohol and other substances, fail in school, commit crimes, or engage in early unprotected intercourse (Dryfoos, 1990a). Yet some youth who face many risks are remarkably resilient. They do well despite seemingly insurmountable odds. This paper describes two promising models for preventing problems and promoting resiliency in youth. Based on the merits of both models, I propose a dual focus on reducing risk factors and enhancing protective factors. Using the example of juvenile crime, I illustrate how the model can be used to design prevention programs. The paper identifies 28 scientifically substantiated risk and protective factors and concludes with several implications for developing effective prevention programs and policies.

What Models Hold Promise for Preventing Problems and Building Resiliency in Youth?

In the last 20 to 30 years, we've tried a variety of approaches to preventing problem behaviors. As a result, our scientific knowledge of how to prevent youth problems has reached an all-time high. We have learned that certain types of programs don't work: providing "information only"; using scare tactics; building self-esteem (Dryfoos, 1990a; Higgins, 1988a); teaching values clarification or decision-making skills to children too young to grasp the concepts (Howard, 1988); and bringing together high-risk kids, which actually reinforced risky behaviors (Dishion, Andrews, Kavanagh, & Soberman, 1996). Two theoretical models that recently emerged, the risk-focused model and the protective-focused model, hold promise as the bases for programs and policies that build resiliency.

Risk-focused Model

One of the most successful prevention models in the last three decades emerged from medical epidemiology, which investigates the causes of disease in populations (Hawkins, Catalano, & Miller, 1992). This model addresses factors that increase risk. For example, in heart disease these risks are a family history of heart disease, smoking, too little exercise and too much dietary fat. Informing people about these risks and encouraging lifestyle changes actually reduced the incidence of heart disease.

This approach can also work in human development. One of the most important advances in the field of child development (Garbarino, 1994) is the recognition that human development, like heart disease, is influenced not by just one risk, but by multiple risks. Taking steps to reduce or eliminate these risks holds promise for preventing youth problems (Hawkins et al., 1992; Segal, 1983).

Protective-focused Model

A second model emerged from studies of children who did well despite facing overwhelming odds in their lives such as mental illness, physical disabilities, parental neglect and abuse, parental alcoholism, poverty or war. Researchers asked: What is right with these children? What protects them? (Garmezy, 1983; Rutter, 1979, 1983, 1987; Werner, 1990; Werner & Smith, 1982). Even with glaring disadvantages and the most adverse conditions, it was unusual for more than a third (Werner, 1992) to a half of children (Rutter, 1985) to display serious disabilities or disorders. These findings suggest that it is important to focus on the characteristics of the children and the circumstances that protect children and foster resiliency and competence.

Although it is tempting to choose one model over the other to guide prevention professionals and policymakers, I argue that both have some validity and neither alone fully captures the reality of the diverse youth population (Bogenschneider, 1996a). For building resiliency in youth, I propose a risk/protective model combining both approaches.

The Risk/Protective Model

The core of this risk/protective approach is simple. As illustrated in Figure 1, to prevent youth problems and promote resiliency, you must identify what factors increase the risk of the problem and then eliminate the factor or reduce its effects. Alternatively, you can identify factors that protect against problems and support or enhance those factors.



Figure 1. The Risk/Protective Model

Recently, some resiliency proponents have argued that the risk and protective models are incompatible and that the protective model is more valuable (Benard 1993; Johnson, 1993; Morse, 1993). Focusing only on protective factors to help youth negotiate a risky environment seems shortsighted if one does not simultaneously work to reduce the number of risks they face. Otherwise it is like encouraging smokers to exercise without encouraging them to quit smoking (Hawkins, Catalano, & Haggerty, 1993). I propose working on both risk and protective factors because reducing risk curtails the number of protective factors youth need, and bolstering protection enables youth to deal with more risks.

Risks are hazards in the individual or the environment that increase the likelihood of a problem occurring. The presence of a risk does not guarantee a negative developmental outcome, but it increases the odds of one occurring. Just as a high-fat diet doesn't

guarantee a person will get heart disease, a single risk seldom places a child in jeopardy. Risks accumulate, like lead poisoning (Cowen, 1983). The more risk factors, the greater the danger.

Protective factors are safeguards in the individual or the environment that enhance youngsters' ability to resist problems and deal with life's stresses. The more protective factors, the more likely a young person will avoid hazards. In this paper, resiliency implies characteristics of individuals that enable them to overcome severe problems, whereas protective factors denote aspects of both individuals and their environments.

Risk and protective factors are not just opposite sides of the same coin, however. For example, if long work hours is a risk factor, short work hours is not necessarily a protective factor. Risk and protective factors emerge from different kinds of studies. Risk factors, for example, lead directly to a negative developmental outcome for most youth. Protective factors, however, emerge from studies of youth who succeed despite adverse conditions such as parental alcoholism, neglect, poverty and war.

Thus, protective factors exert their benefits only when a risk is present (Rutter, 1987). That is, in families without discord a good relationship with at least one parent made little difference in predicting conduct problems. For children growing up in families with discord, however, a good relationship protected children; only one-fourth of those who had a good relationship with one parent showed a conduct problem, compared with three-fourths of children who lacked such a relationship (Rutter, 1983). Thus, processes that protect youth from risk under conditions of stressful life events do not necessarily predict better outcomes for children whose lives are relatively stress-free (Rutter, 1987; Werner & Smith, 1982). In statistical terms, risk processes are main effects and protective processes are interactions (Garmezy, Masten, & Tellegen, 1984; Zimmerman & Arunkumar, 1994).

What Risk and Protective Factors Have Emerged from Scientific Studies?

The next section of this paper summarizes risk and protective factors related to the well-being of youth. They are reviewed beginning at the individual level and proceeding to the family, peer, school, work and community settings (see Figure 2). These factors are illustrated with data from a study of 1,200 adolescents and their parents in rural, suburban and urban school districts in Wisconsin (Bogenschneider, Raffaelli, Wu, & Tsay, in press). At the end I draw some implications of this approach for developing effective prevention programs and policies.

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Individual risk factors

Antisocial behavior. Boys who are aggressive at ages 5, 6 and 7 are more apt to abuse drugs and commit delinquent acts as teenagers (Hawkins, Lishner, & Catalano, 1987). About 40 of 100 kids who are aggressive in the early elementary grades go on to exhibit serious behavior problems in adolescence. As summarized in Wisconsin Family Impact Seminar Briefing Report No. 4 (Bogenschneider, 1994a), seven programs for preventing early aggressiveness and juvenile crime have proven promising: parent management training, early childhood intervention and family support, functional family therapy, teaching problem-solving skills, social perspective-taking training, community-based programs, and broad-based intervention programs (Kazdin, 1987; Zigler, Taussig, & Black, 1992).

Alienation or rebelliousness. Kids who rebel or who feel alienated from their family, school or community are more apt to abuse drugs and become depressed (Hawkins, Lishner, & Catalano, 1987).

Early involvement. The earlier experimentation begins, the less likely young people will have the maturity to avoid negative consequences. For example, the younger the age at which intercourse occurs, the less likely that contraception will be used (Higgins, 1988b). Similarly, when substance use begins before the age of 15, the risk of later drug dependency increases by six to 10 times (Robins & Przybeck, 1987).

Individual protective factors

Well-developed problem-solving skills and intellectual abilities. Resilient youth are not necessarily intellectually gifted, but they possess good problem-solving skills. These intellectual abilities help them control their impulses and concentrate, even when other parts of their lives are chaotic (Werner & Smith, 1982).

Self-esteem and personal responsibility. For kids who face many risks, the belief that one can impact one's own fate is a safeguard (Rutter, 1985, 1987). Self-esteem, however, protects youth in some cases, whereas in other cases it does not. No evidence exists that working on self-esteem alone will reduce risky behaviors.

Well-developed social and interpersonal skills. Resilient youth have personalities that attract and maintain supportive relationships (Werner, 1990). Teaching social skillsspecifically, teaching teens how to recognize and resist peer pressure to engage in risky behaviors-has proven effective in reducing early sexual activity, smoking and marijuana use (Ellickson, 1997; Howard & McCabe, 1990).

Religious commitment. Regardless of denomination, faith equips youth with a sense of security, a belief that their lives have meaning and confidence that things will work out despite hard times (Hawkins, Lishner, Jenson, & Catalano, 1987; Higgins, 1988a, 1988b; Werner, 1990).

Family risk factors

Poor parental monitoring. Youth problems are more likely when parents fail to monitor or supervise their children (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Patterson & Stouthamer-Loeber, 1984). Knowing where children are, who they are with and what they are doing is one of the most powerful means of avoiding virtually any risky behavior. Importantly, parent educators have been able to teach parents to more closely monitor their children's activities and whereabouts through parent education classes (Patterson, 1986) and through instructional newsletters for parents (Bogenschneider & Stone, 1997).

In my studies, parental monitoring is a potent influence on teen substance use and delinquent behaviors. As shown in Figure 3, teen use of substances such as tobacco, alcohol and marijuana was over twice as high among teens who reported low monitoring by their fathers as among those who reported high monitoring. Similarly, in Figure 4, teens' reports of delinquent behaviors, including belonging to a gang; being suspended from school; and being involved in shoplifting, vandalism or a physical fight, were almost four times higher among those who reported low levels of monitoring by their mother, compared with teens who reported high monitoring. In these analyses, as in those that follow, these effects are above and beyond any influences of parent education, family structure and child gender.



Figure 3. Does Father's Monitoring Affect Teen Substance Use?

Note. f(4,217) = 31.96, p = .00. Analyses control for father's education, family structure and child gender.

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Figure 4. Does Mother's Monitoring Affect Delinquent Teen Behaviors?

Note: R(4,281) = 114.43, p = .00. Analyses control for mother's education, family structure and child gender.

Distant, uninvolved and inconsistent parenting. An authoritative parenting style is associated with fewer youth problems than parenting that is too strict, too permissive or uninvolved (Steinberg, 1991). Authoritative parents are warm and responsive, while still providing firm, consistent rules and standards for youth behavior. In the past two decades, home visiting has emerged as one of the most effective methods for promoting more competent parenting (Olds, Henderson, Chamberlain, & Tatelbaum, 1986; Riley, 1994). It has also proven effective in preventing child abuse, increasing child IQ and establishing secure parent-child attachments.

Unclear family rules, expectations, and rewards. Problems are less likely when families communicate clear positions on issues such as drinking and sexual involvement, and establish consequences if rules are broken (Hawkins, 1989). With substances, for example, permissive parental values about teen alcohol use are a strong predictor of teen substance use, stronger even than parents' own alcohol use (Ary, Tildesley, Hops, Lichtenstein, & Andrews, n.d.; Barnes & Welte, 1986; Kandel & Andrews, 1987). As shown in Figure 5, substance use was significantly higher among teens with mothers who were the most approving of teen alcohol use, compared with those who were the most disapproving.

Figure 5. Do Mother's Values Regarding Teen Drinking Affect Teen Substance Use?



Note. f(4,360) = 15.39, p = .00. Analyses control for mother's education, family structure and child gender.

Low parental involvement in school. Parents who are involved in their children's school activities, such as attending parent-teacher conferences, helping with homework when asked and watching their children in sports or activities, have children who perform better academically, even children as old as high school students (Bogenschneider, 1997). When parents were uninvolved in such activities, children reported lower grades, a greater likelihood of dropping out of school and poorer homework habits (Baker & Stevenson, 1986; Epstein, 1982, 1985; Rumberger, Ghatak, Poulos, Ritter, & Dornbusch, 1990). Parental involvement in schooling was a potent predictor of school success regardless of ethnicity, parent education, family structure and parent or child gender (Bogenschneider, 1997). Moreover, parent educators have been able to teach parents of elementary and high school students to become more involved in the schooling of their children (Simich-Dudgeon, 1993; Smith, 1968).

Marital conflict. Marital conflict contributes to youth problems, specifically hostile behavior directed toward others (Crockenberg & Covey, 1991; Mann & MacKenzie, 1996). Marital conflict influences children primarily by interfering with competent parenting, even among children as old as adolescents (Davies & Cummings, 1994; Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993).

Family protective factors

A close relationship with one person. One good relationship can do much to offset the effects of bad relationships (Rutter, 1985). Among high risk families this close relationship often occurs with a grandparent or other relative, but it can also be a teacher or neighbor who takes a special interest in the child (Werner, 1990).

Peer risk factors

Association with peers who engage in problem behaviors. Hanging around with deviant peers increases the odds that youth will get involved in risky behaviors (Barnes, Farrell, & Banerjee, 1994; Newcomb & Bentler, 1989; Small & Luster, 1994). With teen substance use, for example, peer influence is estimated to be four times more

important than parental influence (Kandel & Andrews, 1987). Among teens who reported a high orientation to peers, the average frequency of getting drunk (five or more drinks in a row) in the past month was over twice as high as the average for those who reported low orientation to peers (Figure 6). In Figure 7, teens who reported a high orientation to peers committed nearly one-third more delinquent acts than teens who were less oriented to peers.



Figure 6. Does Peer Orientation Affect Whether Teens Get Drunk?

Note. F(4,285) = 8.89, p = .00. Analyses control for mother's education, family structure and child gender.





Note. F(4,281) = 13.51, p = .02. Analyses control for father's education, family structure and child gender.

Parents, however, still remain an important influence and can restrain their children's peer orientation by being responsive in such ways as expressing love or praise, being available when needed, and engaging in give-and-take discussions (Bogenschneider, Raffaelli, Wu, & Tsay, 1997).

Peer protective factors

A close friend. Kids who have one close friend are more likely to adapt to stressful situations successfully (Werner, 1990).

School risk factors

School transitions. If you wanted to invent a social institution to mess up kids, you couldn't invent anything better than a junior high school (Price, 1989). Compared with students who make only one school transition from eighth grade to high school, students in school systems with middle schools or junior highs must make two transitions. And these transitions occur just as they are experiencing a whole host of changes in their physical appearance, thinking and social relationships. When students move into a middle school or a junior high, alcohol and drug abuse are more apt to increase, while academic achievement, extracurricular participation and psychological wellbeing are more apt to decline (Carnegie Council, 1989; Simmons, 1987; Steinberg, 1991). Younger students are more likely to be affected, as are borderline students, those who lose friends during the move, or those who begin dating at this time (Simmons, 1987; Simmons, Blyth, Van Cleave, & Busch, 1979; Simmons, Burgeson, Carlton-Ford & Blyth, 1987).

Academic failure. Failing in school increases the risk of youth problems, just as youth problems increase the risk of school failure (Brooks-Gunn & Furstenberg, 1989; Hawkins, 1989; Hawkins, Lishner, & Catalano, 1987). For example, youth who fail in grades 4, 5 and 6 are more apt to abuse alcohol in high school (Hawkins, 1989; Hawkins, Lishner, & Catalano, 1987).

Low commitment to school. Students who hate school, who see little value in education, and attend only so they can smoke cigarettes or hang out with their friends are at higher risk for problems (Hawkins, 1989).

Large high schools. According to Garbarino (1994), if he could do only one thing for American teenagers, he would ensure that no child attends a high school larger than 500. Large high schools produce more alienation, more antisocial behavior and higher dropout rates. In small high schools extracurricular participation is twice that in large schools, and borderline students feel a sense of involvement and obligation equal to that of better students (Barker & Gump, 1964).

School protective factors

Positive school experiences. Positive school experiences are not limited to academic achievement; school success can occur in art, music or sports (Rutter, 1987; Werner, 1990). A special relationship with a teacher or the opportunity to take positions of responsibility can also be beneficial. In Figure 8 students who reported a high commitment to school reported less than half as many delinquent behaviors as students who reported a low commitment to school.



Note. F(4, 135) = 11.66, p = .00. Analyses control for mother's education, family structure and child gender.

Work setting risk factors

Long work hours. Among inner-city populations, adolescents who work are no more likely to engage in delinquent behaviors than nonworkers. In other samples, however, high school freshman and sophomores who work more than 15 hours weekly are at higher risk for alcohol and drug use, delinquency and school failure; for juniors and seniors, working more than 20 hours a week is problematic (Steinberg, 1991). As shown in Figure 9, teens who worked 20 or more hours per week reported significantly more delinquent behaviors than those who did not work.





Note. F(4,88) = 5.16, p = .03. Analyses control for mother's education, family structure and child gender.

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Work setting protective factors

Required helpfulness. Work benefits youth if their work makes an important contribution to the family; for example, if children are needed to bring in extra income or help manage the home, work provides a meaningful role for youth (Werner, 1990).

Community risk factors

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Low socioeconomic status. Risk factors occur in bunches; being poor increases the number of risk factors and magnifies their damage (Hawkins, Lishner, Jenson, et al., 1987; Werner & Smith, 1982).

Complacent or permissive community laws and norms. Policies that are unwritten, unclear or unenforced increase youth involvement in risky behaviors. Teens are more apt to drink, for example, when adults drink and the community doesn't mind if teens drink (Baumrind, 1987). Clear community messages, like higher taxes on liquor, decrease the rate of alcohol use among both light and heavy users (Hawkins, 1989; Higgins, 1988a). Raising the drinking age from 18 to 21 reduces alcohol use, but is less effective among heavy users.

Low neighborhood attachment and high mobility. Youth problems are more likely when neighbors don't know each other; parents have few opportunities to talk with one another; and no community standards exist regarding curfews, drinking and dating (Hawkins, 1989).

Media influences. The link between television viewing and aggression in children is firmly established (Eron, 1982; Huesmann, Lagerspetz, & Eron, 1984). The connection between TV viewing and either drinking or sexual activity is not as clear-cut; yet alcohol manufacturers target an estimated \$2 billion of advertising annually toward youth (Higgins, 1988b).

Community protective factors

Belonging to a supportive community. Resilient youth rely on a greater number of people such as neighbors, teachers and clergy than youth who do not cope as well (Garmezy, 1983; Werner, 1990; Werner & Smith, 1982). Mothers are also warmer and more stable when there are more adults around to help. For example, social isolation is one of the best predictors of a child-abusing family (Werner & Smith, 1982).

Bonding to family, school and other social institutions. Youngsters who feel emotional ties to their family, school or community are more apt to accept values and behaviors society deems desirable (Hawkins, Lishner, & Catalano, 1987). To build these ties, kids need opportunities for involvement, the skills to be successful and rewards for their accomplishments (Hawkins, 1989).

Cumulative Risk

In one study of 10-year-old children, the presence of one risk factor wasn't much more likely to be associated with psychiatric disorder than when no risk factors were present; with two risk factors, there was four times the chance of problem behaviors; and with four risk factors, the risk increased as much as 20 times (Rutter, 1979). In my study, I examined whether the number of risks (e.g., low parental monitoring, negative peer pressure and academic failure) affected teen substance use and delinquent behaviors. In

Figures 10 and 11, as the number of risks increases so does the likelihood that the teen will use substances or commit delinquent acts.

The bottom line is that if we are serious about supporting youth, we need to address as many of these risk and protective factors as possible. As illustrated in Figure 12, if a community decides to address alcohol use and abuse, they may need a multidimensional approach. Parent education may be needed, schools can be reorganized, programs can teach refusal skills and so forth. Model programs exist to address many of these risk and protective factors.



Figure 10. Do the Number of Risks Affect Teen Substance Use?

Note: R(9,634) = 11.44, p = .00. Analyses control for mother's education, family structure and child gender.





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Figure 12. A Multidimensional Risk/Protective Focus



Are some risk and protective factors more important for some risky behaviors than others?

The short answer is yes. One limitation of the risk/protective model is that not all risk and protective factors are equally important. Some factors may be more important for one child than another, in one period of development than another and in one setting than another. Moreover, some risk factors are more important for some youth problems than others. For example, the availability of contraceptives may not be relevant to substance use, but is central to preventing teenage pregnancy.

Even for a single risky behavior, such as juvenile crime, are some risk and protective factors more important for some juvenile offenders than others?

Assuming that all teenagers who commit crimes are psychologically similar is wrong (Moffitt, 1993), and can thwart efforts to develop effective policies and programs. Over 80 percent of all adolescents report having committed a chargeable offense at one time or another, but most of these "normal" adolescents do so infrequently (Moffitt & Harrington, in press; Steinberg, 1989). A small proportion of youth are responsible for most juvenile offenses (Hawkins, Lishner, Jenson, & Catalano, 1987). An estimated 5 to 8 percent of youth are responsible for 40 percent of all police contacts and two-thirds to three-fourths of all offenses (Patterson, 1994; Yoshikawa, 1994). A growing body of studies by such researchers as Temi Moffitt at UW-Madison and Gerald Patterson and his colleagues at the Oregon Social Learning Center reveal that not all delinquents are the same. Instead of one grand explanation for delinquency, it may be more accurate to think of one explanation for those who begin their criminal careers at a later age and one for those who begin their criminal careers earlier (Patterson & Yoerger, 1993).

Youth who begin delinquent activity at age 15 or later are more apt to stop their delinquent behavior as they mature. In fact, by age 28, almost 85 percent of former delinquents have stopped committing crimes (Moffitt, 1993).

Those who begin their criminal careers early get started on the wrong foot and are more likely to become frequent offenders, commit violent crimes and continue criminal activity as adults. Not only is their antisocial behavior consistent over time, but also across settings; for example, early-occurring delinquents "lie at home, steal from shops,"cheat at school, fight in bars, and embezzle at work" (Moffitt & Harrington, in press, p. 8).

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What leads to late-blooming delinquency?

Late bloomers who commit their first offense at age 15 or later comprise the majority of delinquents. Psychologically, this type of delinquent appears to be quite normal: socially skilled, popular with peers and with no history of previous problems. Late-blooming adolescents can be found in most communities, their families appear to be less disadvantaged than those of early-occurring delinquents, and the parents appear more skillful in family management practices (Steinberg, 1987). They are influenced primarily by factors such as knowledge of their friends' and peers' delinquent acts; susceptibility to antisocial peer pressure (Steinberg, 1987); poor parental monitoring or supervision (Steinberg, 1987); and limited opportunities to demonstrate their maturity other than through delinquency.

What leads to early-occurring delinquency?

Early starters—those who begin criminal activities before age 15—are more apt to become frequent offenders, commit violent crimes, and continue criminal activity as adults. Their families tend to be low socioeconomic status, frequently unemployed and oftentimes divorced (Patterson & Yoerger, 1993; Steinberg, 1987). Early starters often are antisocial, aggressive and lacking in self-control as preschoolers.

Researchers at the Oregon Social Learning Center have concluded that 30 to 40 percent of the antisocial behavior of these early offenders can be tied to harsh, inconsistent parenting during the preschool years (Patterson, 1986; Patterson & Yoerger, 1993). Parents of these early offenders threaten, nag and scold but seldom follow through (Patterson, 1986). This teaches children to resolve conflict through coercion—specifically whining, yelling, temper tantrums or physical attacks (Patterson, 1994). This aggressive behavior leads to rejection by prosocial peers, trouble with teachers, and poor school performance (Patterson, Debaryshe, & Ramsey, 1989). Negative consequences snowball, and these youngsters, who are poorly monitored by their parents, drift into deviant peer groups (Dishion, Patterson, & Griesler, 1994) and increase their use of illegal substances as shown in Figure 13 (Dishion, French, & Patterson, 1995). Over time, they fail to develop the skills for stable work or marriages that might enable them to drop out of crime as an adult (Caspi, Elder, & Bem, 1987; Patterson & Yoerger, 1993).

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Source: Patterson, DeBaryshe, & Ramsey, 1989

What leads to violent juvenile crime?

The best predictors of who will become violent offenders are youth who commit their first crime at an early age and continue their criminal careers. No special explanation for violent crime is needed. If you can determine who starts early, you can predict frequent offenders, and frequency appears to predict violent offenses (see Table 1).





Using this risk/protective model, which approaches work best for preventing juvenile crime?

Based on the two types of juvenile delinquency, one set of prevention programs is needed to head off those children at risk of becoming early starters. Another set needs to begin after the age of 10 or 11 to focus on children at risk of becoming late bloomers.

For "late bloomers," broad-based programs are needed that address the individual, peer group, family and community. Adolescents should learn peer refusal skills and parents should learn the importance of monitoring their children more closely. Communities need to take steps to provide definite consequences for youth misbehavior, but avoid labelling first-time offenders as "delinquent." Communities can also take steps to support families, alleviate family stress and provide opportunities for youth to demonstrate their maturity in socially beneficial ways.

For "early starters," prevention programs that begin early hold the greatest promise, based on evidence that aggression is quite stable much like IQ. For example, those children whose classmates said they were the most aggressive in third grade, committed more serious crimes as adults. At age 30, these highly aggressive 8-year-old males were more likely to commit crimes, commit serious crimes, violate traffic laws, drive while drinking, severely punish their children, and view themselves as aggressive. Similarly, females who were highly aggressive at age 8, scored higher at age 30 on criminal convictions, severe punishment of their children, and self-reported aggression. There are virtually no antisocial adults who were not antisocial as children (Moffit & Harrington, in press), yet most antisocial youth do not become antisocial adults (Moffitt, 1993).

Do these findings suggest that aggression is a stable trait that cannot be budged?

Quite to the contrary, studies suggest that prevention programs provided early, specifically before school entry, hold the greatest promise (Hawkins, et al., 1987; Reid, 1993); Yoshikawa, 1994). For example, The Oregon Social Learning Center's Parent Management Training reduces child aggression. Its success rate, however, is 63 percent for children 3 1/2 to 6 years old and only 27 percent with children 6 1/2 to 12 years old (Patterson, Dishion, & Chamberlain, 1993). After the child enters school, changing serious behavior problems is still possible, but becomes more difficult.

Prevention efforts that begin before school entry can focus almost exclusively on parents. Parents can be taught less harsh and more consistent discipline tactics. Prevention strategies that reduce stress on families (i.e., poverty, low social support, unemployment, frequent moves, divorce, single parenthood, violent media messages, and permissive laws and norms) can also help parents do their best. After school entry, however, prevention strategies must become much more comprehensive, targeting not only parenting skills and family support, but also academic failure and rejection by prosocial peers.

How can the risk/protective model guide prevention efforts?

This model was used as the basis for forming 22 community coalitions of parents, educators, community leaders and youth in Wisconsin, ranging from a small agricultural community of less than 700 people to a 12-block inner-city neighborhood in Milwaukee (see Bogenschneider, 1996a). These coalitions were successful in develop-

ing comprehensive plans to prevent risky behaviors such as alcohol use, depression and violence. They have reduced risk and strengthened protective factors through such comprehensive prevention strategies as providing parent education and family support; establishing parent networks and parent-teacher associations; developing consistent, clear laws and norms regarding youth involvement in risky behaviors; and providing meaningful roles to bond youth to the community.

At last count over 30 local policies had been changed, including reducing the number of liquor licenses, stiffening the penalties for selling alcohol to minors, increasing the penalties for underage drinking and reducing the supply of alcohol. To date we know that we were successful in reducing documented risks and bolstering proven protective processes. Effects on risky behaviors are currently being examined.

What implications does the model have for policymakers?

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According to the risk/protective model, youth are more apt to make a successful transition into adulthood when they are supported by a loving family, close friends, good schools and caring communities. In this final section I turn to implications of the risk/protective approach for developing prevention programs and policies.

1. Focus on proven risk and protective processes. Despite little evidence that improving self-esteem reduces problem behaviors, "Selling self-esteem to children has become big business" (Dryfoos, 1991, p. 633). Policymakers and prevention programmers could benefit from a number of papers reviewing risk and protective factors in the areas of academic achievement (Higgins & Mueller, 1988; Sameroff, Seifer, Barocas, Zax, & Greenspan, 1987), child abuse (Belsky, 1990), depression (Bogenschneider, 1993a; Harn, 1991; Petersen, Compas, Brooks-Gunn, Stemmler, Ey, & Grant, 1993), drug and alcohol abuse (Bogenschneider 1993b; Hawkins et al., 1992), juvenile delinquency (Bogenschneider, 1994b; Hawkins, Lishner, Jenson, et al., 1987), suicide (Alcohol, Drug Abuse, and Mental Health Administration, 1989), and teenage pregnancy (Higgins, 1988b; Bogenschneider, 1996b; Small & Luster, 1994).

2. Develop comprehensive approaches. Like most diseases, risky behaviors in youth cannot be cured with one treatment (Dishion et al., 1996). Most problem behaviors have not one cause, but many. All too often we look for "magic bullets," quick solutions to complex problems, which result in piecemeal, Band-Aid approaches. Youth problems are much too complex and the solutions much too comprehensive for any single policy or program. The best approach may vary by personality, age and context. For example, in a disadvantaged inner-city neighborhood, the best approach may be to focus on protective factors to instill a sense of hope into a seemingly desperate situation. In a rural community or a middle-class suburb, the best approach may be one that jars complacency and overcomes denial by emphasizing the risks that even youth living behind white picket fences may face.

3. Involve parents for long-term success. In a longitudinal study that followed children from birth to age 32, the parenting that children received was a stronger predictor of their long-term outcomes than even the biological complications they may have faced during pregnancy, delivery and the early years of life (Werner, 1992). Mounting evidence suggests that parent education and family support improves parenting competence (Patterson, 1986; Powell, 1986; Wandersman, 1987; Weiss, 1988), which, in turn, is thought to benefit children (Bronfenbrenner, 1986; Zigler & Styfco, 1993). Changes in parenting practices continue to benefit children long after the formal program ends.

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4. Invest in programs with evidence of effectiveness. Avoid Band-Aid solutions and the latest trendy approaches. Only good programs produce good results (Zigler & Styfco, 1993). We know what doesn't work—providing information only, using scare tactics, building self-esteem, teaching values clarification or decision-making skills to children who are too young, and bringing together only high-risk youth. This paper notes some of the prevention strategies that we know work, such as teaching parents specific parenting practices and ways to become involved in their children's schooling, and teaching youth social perspective-taking and refusal skills. We also know some methods that work, such as home visiting, parent education classes, instructional newsletters and broad-based community approaches.

5. Intervene early and continuously. There are no magical periods of development (Zigler & Styfco, 1993). Programs provided early, however, hold the greatest promise (Reid, 1993; Yoshikawa, 1994). For example, Patterson's parent education program reduced early child aggressiveness with a success rate of 63% for children aged 3 to 6 and only 27% with children 6 to 12 (Patterson, Dishion, & Chamberlain, 1993). Prevention efforts that begin before school entry can focus more exclusively on parenting; after school entry more comprehensive strategies are needed to also target academic failure and problems with peers. Thus, for maximum effectiveness, programs need to begin early, preferably before problem behaviors develop, and they need to continue to ensure that healthy behaviors, once begun, are sustained (Dryfoos, 1990b). Expecting any short-term program to keep kids out of trouble is unrealistic. Programs that offer "boosters" throughout high school produce longer-lasting effects than one-time lessons (Ellickson, 1997).

6. Build on the supports that already exist in the community. Policies need to take steps to foster, not replace or weaken, naturally occurring sources of support for parents in the extended family, neighborhood and community. If parents are unavailable, other persons can play a supportive role: grandparents, older siblings, caring neighbors, ministers, Big Brothers and Big Sisters and youth workers in 4-H or YMCA/YWCA (Werner, 1992). Policies can create formal structures to encourage people to develop and rely on their own sources of social support, which in the future will render the formal programs obsolete (Bronfenbrenner & Weiss, 1983).

7. Remember the lesson of resiliency—the odds can be changed. From studies of parent education, we know that human beings possess the capacity for more competent parenting if given reliable information on how to do so and that social policies and programs can help parents become more competent. From studies of children who succeed against the odds springs the message of hope (Werner, 1992). Some things work, "if not for every vulnerable child, at least for many; if not all the time, at least some of the time; if not everywhere, at least in some places" (Werner, 1992, p. 112).

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