Preventing Multiple Risky Behaviors Among Adolescents: Seven Strategies

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OVERVIEW

Taking risks is fairly common in adolescence. Risky behaviors can be associated with serious, long-term, and – in some cases – life-threatening consequences. This is especially the case when adolescents engage in more than one harmful behavior. The tendency for risky behaviors to co-occur has been well-studied. Yet prevention efforts traditionally have taken a targeted approach, seeking to prevent a single risky behavior. A more powerful and cost-effective approach may be to employ strategies designed to address factors associated with *multiple* risky behaviors.[1] This *Research Brief* brings together findings from developmental science and from rigorous program evaluations to identify seven actionable, feasible strategies and relevant programs that have been found to affect two or more risky behaviors. These strategies are to:

1. Support and strengthen family functioning;
2. Increase connections between students and their schools;
3. Make communities safe and supportive for children and youth;
4. Promote involvement in high quality out-of-school-time programs;
5. Promote the development of sustained relationships with caring adults;
6. Provide children and youth opportunities to build social and emotional competence; and
7. Provide children and youth with high quality education during early and middle childhood.

BACKGROUND

Preventing adolescent risky behaviors is important for several reasons. One is that engaging in a risky behavior can set the stage for engaging in other risky behaviors, thus increasing the likelihood of self-injury, victimization by others, and other negative consequences that result from these behaviors.[2,3,4] Another reason is that consistently engaging in even one type of risky behavior can undermine progress toward positive educational goals, such as graduating high school on time and can increase the likelihood that social, behavioral, physical, and mental health problems will develop later in life. For example, heavy drinking in adolescence is associated with negative health outcomes in adulthood such as alcoholism, obesity, and high blood pressure.[5,6] Adolescent marijuana use has been linked to higher rates of

cognitive difficulties, isolation, stealing, cutting class, and aggressive behavior. Illicit drug use, in general, has been found to heighten the likelihood of engaging in risky sexual behavior, delinquency, crime, and drug abuse, as well as to increase the risk of injury and death resulting from motor vehicle crashes.[7,8] Aggression and delinquency have been found to predict lower levels of educational attainment and higher levels of mental health, substance abuse, and economic problems.[9,10] Risky sexual behavior places youth in danger of acquiring sexually transmitted infections, having an unintended pregnancy, and becoming a teen parent. Moreover, engaging in *multiple* risky behaviors further elevates the likelihood of poor outcomes.

The table below briefly outlines a subset of risk and protective factors[a] that directly and indirectly influence the development of risky behaviors at the individual, family, peer, school, and community levels. These factors are classified by whether they are relatively malleable or whether they are non-malleable or difficult to change.

Table 1: Risk and Protective Factors Related to Multiple Adolescent Risky Behaviors

Malleable Factors	Non-malleable, Less-malleable, or Difficult to Change Factors
Individual Factors: • Early risk behaviors (-) • Social-emotional & social-cognitive deficits (-) • Academic difficulties (-) • Acculturation stress (-) • Social and emotional competence (+) **Family Factors** • Ineffective family management practices (-) • Family violence and child maltreatment (-) • Positive parent-child relationship (+) • Effective family management (+) **Peer Factors** • Affiliation with delinquent or antisocial peers (-) **School Factors** • School connectedness (+) **Community Factors** • Unsupportive, unsafe neighborhood (-) • Connections to caring adults (+) • Participation in community or high quality out of school time activities (+)	**Individual Factors** • Learning disability (-) • Low intelligence quotient or IQ (-) • Impulsivity (-) • Problems concentrating or paying attention (-) • Sensation seeking (-)[11] • Religiosity (+) **Family Factors** • Incarcerated parent (-) • Single parent household (-) • Family poverty (-) **Peer Factors** • Peer norms favoring antisocial behavior (-) • Supportive close friendships (+) **School Factors** • Staff turnover (-) • Large classroom size (-) **Community Factors** • Residential mobility (+)

*All of the factors listed are associated with at least two adolescent risk behaviors. Factors marked with a minus (-) sign are risk factors and those marked with a plus (+) sign are protective factors.

The seven strategies presented in this *Brief* [b] address the malleable factors identified above, and may be used to guide prevention planning on a community or state level.

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[b] This *Brief* is based on a forthcoming report[1] that provides a detailed review of the research with references. Studies reviewed are based on multivariate analyses. Programs suggested have been evaluated in random assignment or rigorous quasi-experimental studies.

As noted, prevention and intervention programs and policies are most often developed to improve outcomes in one specific area. For example, a program may target pregnancy prevention, drug abuse prevention, or violence prevention. However, the reality is that adolescents often engage in more than one risky behavior.[12] Although much research still tends to be conducted in narrow "silos," comparisons across silos identify numerous *common* factors that may contribute to certain behavior. For example, adolescents from multi-problem families face an elevated risk of pregnancy, school failure, and substance use.[13,14] Fortunately, program effects often extend beyond the outcome that was specifically targeted. A well-known example of this pattern can be seen through the experience of the **Seattle Social Development Project**[15] (now called **Raising Healthy Children**).[16] Designed initially to prevent drug abuse and aggression, this five-year, elementary school-based program – which includes a parent training component – resulted in expected reductions in alcohol use, aggression, and delinquency at program completion. However, a 10-year follow-up study found higher levels of condom use and lower rates of pregnancy among program participants than among comparable youth who did not participate in the program.

The idea that a drug abuse prevention program can also prevent sexual risk taking is not surprising, in light of our developing knowledge of shared risk and protective factors and multiple studies validating theories of problem behavior that point to a common origin.[17] However, using a more comprehensive strategy to design a program or policy should yield even more favorable results. To inform a more comprehensive strategy, we have identified seven strategies for preventing multiple risky behaviors that address the common (and malleable) risk and protective factors outlined in Table 1.

Strategy One: Support and Strengthen Family Functioning

Teaching parents how to cope with stress, communicate clear expectations, eliminate coercive parenting, and reward positive behaviors appears to prevent and deter children and youth from engaging in risky behavior.[18,19,20,21,22] For example, teaching teen mothers positive parenting skills and providing support while their children are young appears to not only decrease the number of subsequent pregnancies and births among the mothers, but also to improve children's long-term social development and reproductive health outcomes. **Nurse-Family Partnership (NFP)**,[23] a program providing assistance to mothers of young children, has been found in multiple randomized trials to have positive impacts on young mothers (decreasing the likelihood of repeat pregnancies and births, increasing time between births, increasing rates of smoking cessation, and reducing welfare receipt) and also to have long-term positive impacts on their children's reproductive health and social behavior. In a ten-year follow-up study, adolescent children whose mothers had been randomly assigned to receive the program were found to have fewer sexual partners than did adolescent children whose mothers were randomly assigned to the control group.

During middle childhood and adolescence, family strengthening programs that teach parents family management skills have been found to reduce peer conflict, aggression, delinquency, and even substance use.[24,25,26] Examples of such programs that have been rigorously evaluated and found to have positive impacts on multiple risky behaviors include **Strengthening Families Program for Parents and Children 10-14**[27] (for both at-risk and less vulnerable adolescents) as well as **Functional Family Therapy (FFT)**,[28] **Brief Strategic Family Therapy (BSFT)**,[29] and **Multisystemic Therapy (MST)**[30] (for higher risk youth).

Strategy Two: Increase Connections between Students and Their Schools

Children and youth who feel connected to their schools are less likely to bully or be bullied, to engage in delinquent behavior, and to use drugs and alcohol. Multiple strategies have been found to increase school connectedness.[31] Character education represents one approach.[32,33] Character education programs promote positive values, such as treating others fairly, showing others respect and understanding, and displaying empathy, caring and support for others. In this way, the programs seek to foster caring and supportive interpersonal relationships and a positive school climate, as characterized by opportunities to participate in school activities and decision making and shared positive norms, goals, and values.[34] All of these characteristics have been associated with positive classroom behavior, [35,36,37,38] lower levels of substance use and delinquency,[39] and lower levels of violence and bullying.[40,41] Findings from evaluations of the **Positive Action Program**[42] (a school-based character education program for students in grades K- 12) indicate that this intervention reduces school misconduct, truancy, bullying, and substance use. The program also was found to have positive impacts on math and reading standardized test scores.

Additional promising strategies to promote school connectedness include encouraging student participation in school-based, extracurricular activities during or after school;[43] promoting teachers' classroom management skills and better understanding of child and adolescent behavior and development;[44] increasing adult supervision in less supervised areas or "hot spots" inside and outside of school; articulating and enforcing explicit school policies that prohibit all forms of antisocial behavior;[45,46] and addressing incidences of bullying and disrespectful behavior consistently and with fairness.

Strategy Three: Make Communities Safe and Supportive for Children and Youth

Children and youth who live in safe, supportive communities are less likely to use drugs, exhibit aggressive behavior, commit crimes, and drop out of school. Although strong empirical evidence exists to support this association, only a handful of interventions designed to achieve community-level change have been evaluated rigorously. One example of a promising and innovative community-level approach is **CeaseFire** (http://ceasefirechicago.org).[47] Implemented since 1999, this federally-supported, Chicago-based intervention is designed to reduce community violence through street-level outreach and intervention, public education, clergy involvement, law enforcement, and community mobilization. The intervention is unique in two ways. First, it relies heavily on trained outreach workers or "violence interrupters"— staff who are former gang members and/or grew up in the same neighborhoods and have a background with life on the streets — to connect and intervene with participants, work to change their behavior, and link them to needed resources. And second, it uses statistical and key informant data to guide programming. These data are used to inform where and with whom to concentrate program efforts and also identify which risk factors to target. The program is designed to intervene with the highest-risk members of a particular community —those with a high chance of either "being shot or being a shooter" in the immediate future.[48] Quasi-experimental evaluations conducted thus far suggest that several Chicago neighborhoods experienced fewer shootings and killings (by 17 to 24 percent), decreases in the size and the intensity of shooting "hot spots" (areas of high volumes of criminal activity), and greater reductions in retaliatory, gang-related murders, relative to matched comparison areas.[49]

A randomized evaluation of the **Communities that Care (CTC)**[50] prevention strategy finds that implementation of CTC prevents multiple adolescent risk behaviors. CTC helps

community stakeholders and decision makers form coalitions to address the issues facing youth in their communities effectively. The first step in this process is conducting a community survey designed to assess risk and protective factors for delinquency, violence, substance use, and school dropout. Next, communities must identify three to five risk and/or protective factors to address and then select evidence-based programs and strategies that target these factors. After two to three years of implementation, communities conduct another survey to assess the impacts of these programs and strategies and identify emerging issues. A 2008 study found that implementing CTC seemed to reduce adolescents' risk for delinquency, but not their risk for initiating substance use after one to three years. However, the three-year follow-up found impacts on substance use (alcohol and cigarettes), risky sex, and delinquent behavior.[51] Although studies of the CTC approach have found population-level changes in delinquency and drug use, it should be kept in mind that impacts vary with the level and quality of implementation.[52]

Strategy Four: Promote Involvement in High Quality Out-of-School-Time Programs
Involvement in high quality out-of-school-time programs has been linked with decreased drug abuse, delinquency, and sexual risk-taking behaviors. Out-of-school time programs are social and academic enrichment programs for children and youth, often community-based, that are implemented before or after the school day or during the summer months. The program may include tutoring, mentoring, recreational activities, service learning and career development opportunities, and college preparation. A recent study conducted by Child Trends, using data from the Every Child, Every Promise Survey,[53] found that adolescents in high-quality programs were more likely to avoid risky behaviors, to have better performance in school, and to have greater social competence than those who were not enrolled in such programs.[54] High quality afterschool programs offer structured, supervised, and safe opportunities for community involvement and, in turn, reduce opportunities for delinquent and other risky behaviors, which are greatest during the afterschool hours.[55] Efforts to improve outcomes for children and youth in out-of-school time programs can benefit from implementing proven practices from the field and assessing program quality program for self-assessment and program improvement.[56,57,58] Finally, as described in Strategy Six, research suggests that high quality afterschool programs focused on promoting personal and social skills can reduce rates of drug use and problem behaviors.[59]

Strategy Five: Promote the Development of Sustained Relationships with Caring Adults
Children and youth who report that they have positive relationships with adults and those who receive mentoring in the context of a long-term supportive relationship are more likely to succeed on multiple fronts. Community-based mentoring programs and programs with mentoring components have been found to decrease rates of pregnancy,[60] drug and alcohol use,[61] physical aggression,[62] school suspension,[63] and truancy.[64] Reviews of mentoring programs conducted by Child Trends[65,66] found that youth who participate in these programs reap several benefits, including increased school engagement, parent-child communication, and a decreased likelihood of substance use and delinquent behaviors than did similar youth who did not participate in any program. Public/Private Ventures found that mentoring relationships that were long-term (more than 12 months) and that involved frequent meetings (at least once a week) were associated with better child and youth outcomes.[67] A study examining the effects of relationship duration using data collected from an evaluation of the **Big Brothers/Big Sisters**

(BB/BS)[68] program found that mentoring relationships ending in three months or less had adverse effects on self worth and perceived scholastic competence.[69]

Overall, research confirms the potential of positive mentoring relationships to strengthen or modify other relationships in young people's lives.[70] The evidence indicates that young people who develop strong and engaging connections with their mentors also expand their capacity to relate well to others[71]. Studies have revealed connections between mentoring relationships and improvements in young people's perceptions of support from peers[72] and from significant adults in their social networks.[73]

Research on developmental assets, conducted by the Search Institute suggests that each young person should receive support from three or more non-parental adults.[74] In addition to formal mentors, extended family members, neighbors, teachers, community leaders, and other adults who spend time with youth can all provide positive, caring relationships and can help to ensure that all children have at least three caring adults in their lives. Relationships that are built on trust, empathy, and mutuality[75] provide a nurturing support system that promotes positive transitions as youth mature. Caring and connectedness can be powerful tools to protect young people from negative behaviors and help them develop good social skills and a more positive identity.

Strategy Six: Provide Children and Youth Opportunities to Build Social and Emotional Competence

Children and youth with strong social and emotional competence are less likely to engage in risky behaviors related to aggression, substance use, and sexual risk taking. Skills related to social and emotional competence include communication skills, emotional awareness, peer-refusal skills and emotional regulation. These skills promote positive social development in multiple ways. They assist youth in developing close friendships, having positive peer relations, engaging in positive social behaviors (and selecting and attracting friends with positive behaviors), and avoiding negative social influences.[76,77,78] Conversely, children and youth with low social competence are more likely to be rejected, excluded, or bullied by same-age peers, experience adjustment problems, and engage in antisocial, aggressive behavior.[79,80]

Fortunately, social and emotional competence can be improved by intervention. High-quality afterschool and school-based programs have been found to achieve positive results for children and adolescents.[81, 82,83, 84] For example, a meta-analysis of afterschool programs designed to promote personal competencies such as self control and self efficacy and social skills such as problem-solving, conflict resolution, and leadership, found that programs using "SAFE" skill development approaches (sequential, active, focused, and explicit)" were associated with lower rates of problem behavior and drug use.[85]

School-based programs have also found positive effects. For example, the **Teen Outreach Program** (**TOP**)[86] has been found to prevent drug use, violence, delinquency, HIV transmission, and teen pregnancy. Rigorous evaluations of social and emotional learning programs – for example, **Second Step**,[87] **Promoting Alternate Thinking Strategies (PATHS)**,[88] and **Responding to Conflict Creatively Program**[89] – have had positive impacts on verbal and physical aggression, attitudes towards aggression, and social exclusion in children and pre-adolescents.[90] Interventions that employ social skills training strategies with high-risk students (such as the **Coping and Support Training**, or **CAST,** program)[91] have also been associated with lower rates of physical fighting and substance use.[92] While determining cause

and effect is a complex task, it is clear that promoting social and emotional competence is critical for young people and also relatively malleable, making it a good target for intervention.

Strategy Seven: Provide Children and Youth with High Quality Education during Early and Middle Childhood

Children who receive high-quality early care and/or high-quality education in elementary school are less likely to engage in substance use and risky sexual behavior when they get older. High-quality, intensive early childhood interventions have been found to change children's academic trajectories and improve behavioral outcomes in adolescence and young adulthood. For example, results from a long-term study of the **High/Scope Perry Preschool Program**[93] show that program participants were less likely to be arrested by the age of 40 than were nonparticipants with similar backgrounds (36 percent versus 55 percent) and that low-income African American participants were less likely to have or father a child outside of marriage by the age of 27 than were their nonparticipant counterparts (57 percent versus 83 percent). The **Carolina Abecedarian Program**,[94] another intensive early childhood program, also has been the focus of a long-term study. The program was found to decrease participants' likelihood of becoming teen parents and of using marijuana in the past month (i.e. the month before they responded to questions in a follow-up survey as part of the study).[95]

Educational programs for elementary school children, such as **Success for All**[96] and **Learning Language and Loving It**,[97] have been found to improve early characteristics of healthy social development (such as positive peer relations and effective communication skills) and, therefore, may also hold the potential to prevent the development of risky behaviors in adolescence. These findings suggest a need to assess whether improvements in academic outcomes during early and middle childhood can prevent later risky behaviors, taking into account risk factors present at baseline.

DISCUSSION

Our current review of relevant research suggests implications for various stakeholders. Program planners, funders, community stakeholders, and policy makers could use community and state-level data to assess risk and protective factors across multiple ecological domains and then employ evidence-based programs designed to address these factors with strategic populations.[98] Informed by research demonstrating that problem behaviors often co-occur, youth service providers, funders, and policymakers could expand their target population to include adolescents at risk for multiple risky behaviors and offer and/or support interventions that address a broader range of outcomes. Private foundations, academic institutions, research centers, and government agencies could facilitate this process by identifying and/or funding programs found to prevent or reduce multiple risky behaviors. Further research is needed to identify effective gender- and ethnic-sensitive approaches that steer adolescents away from risk behaviors.

CONCLUSION

High-risk behaviors in adolescence often co-occur and share common origins, suggesting that improving outcomes for youth may require a more integrated approach to prevention that targets multiple contexts of adolescents' lives (family, peer, school, community) and multiple

forms of risky behavior.[99] The strategies presented in this *Research Brief* illustrate the roles that families, peers, schools and communities play in preventing adolescent risky behaviors. Evidence supports prevention programs that target shared risk and protective factors across a number of social contexts and equip young people with critical knowledge and skills needed to avoid risky behaviors.

ENDNOTES

[1] This brief is based on a forthcoming report: Terzian, M.A., Andrews, K.M., &Moore, K.A. (2011). *Preventing Multiple Risky Behaviors: An Updated Framework for Policy and Practice.* Washington DC: Child Trends.
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