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Promising Parenting Programs for Reducing Adolescent Problem Behaviors

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Abstract

Purpose—Adolescent problem behaviors (substance use, delinquency, school dropout, pregnancy, and violence) are costly not only for individuals, but for entire communities. Policymakers and practitioners that are interested in preventing these problem behaviors are faced with many programming options. In this review, we discuss two criteria for selecting relevant parenting programs, and provide five examples of such programs.

Design/methodology/approach—The first criterion for program selection is theory based. Well-supported theories, such as the social development model, have laid out key family-based risk and protective factors for problem behavior. Programs that target these risk and protective factors are more likely to be effective. Second, programs should have demonstrated efficacy; these interventions have been called “evidence-based programs” (EBP). This review highlights the importance of evidence from rigorous research designs, such as randomized clinical trials, in order to establish program efficacy.

Findings—Nurse-Family Partnership, The Incredible Years, Positive Parenting Program, Strengthening Families 10–14, and Staying Connected with Your Teen are examined. The unique features of each program are briefly presented. Evidence showing impact on family risk and protective factors, as well as long-term problem behaviors, is reviewed. Finally, a measure of cost effectiveness of each program is provided.

Originality/value—We propose that not all programs are of equal value, and suggest two simple criteria for selecting a parenting program with a high likelihood for positive outcomes. Furthermore, although this review is not exhaustive, the five examples of EBPs offer a good start for policymakers and practitioners seeking to implement effective programs in their communities. Thus, this paper offers practical suggestions for those grappling with investments in child and adolescent programs on the ground.

Keywords

Evidence-based practice; Parenting; Family; Programs; Prevention; Adolescent; Child; Substance use; Violence/aggression; Dropout; Teen pregnancy; Delinquency

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Web Resources
Nurse-Family Partnerships: www.nursefamilypartnership.org
The Incredible Years: http:www.incredibleyears.com/
Triple P: www.triplep.net/
Strengthening Families 10–14: www.extension.iastate.edu/sfp/
Staying Connected with Your Teen: www.channing-bete.com/prevention-programs/staying-connected-w-your-teen/

Introduction

In the past 30 years, physicians, educators, and scientists have made dramatic advances in what we know about effective parenting. It is now clearly possible to help parents raise more successful children — children who are mentally healthy, able to resist negative influences to take dangerous physical and health risks, confident, caring, and connected in positive ways to their schools and families. We now have evidence that certain scientifically tested parenting programs create better outcomes for children whose parents participate in them. These programs work with a wide variety of families in diverse settings. Often all it takes is parents' willingness to make a small investment of time and effort — in some cases as little as 10 hours of a workshop over a period of seven weeks — to learn skills that will change their children's development for the better for years.

Substance use, delinquency, school dropout, teen pregnancy, and violence all can be devastating for parents and also pose serious social, health, and economic consequences in developed societies (Catalano et al., 2012; Rehm et al., 2009). These five behaviors will be collectively referred to as "problem behaviors" in this publication. They are grouped together because they often coincide with one another (i.e., youth who display one behavior also display others) and share common etiological risk and protective factors (Catalano et al., 2011). Because problem behaviors have serious consequences in childhood and can lead to even more severe setbacks in adulthood (e.g., unemployment, crime), it is critical to prevent the initiation and progression of these behaviors. Various strategies have been proposed to date. Here, we focus on parent and family programs for preventing problem behaviors.

An extensive body of literature has shown that parents are a key factor in the prevention of problem behaviors (Catalano et al., 2011; Hawkins et al., 1992; Stone et al., 2012). For instance, favorable parental attitudes toward antisocial behavior, lack of clear guidelines for behavior, poor monitoring, harsh or inconsistent discipline, and high levels of family conflict are predictive of more adolescent problem behavior (Herrenkohl, Lee, et al., 2012); therefore, these are known as risk factors. Alternately, strong parent-child bonding, opportunities for active involvement in the family, and recognition for positive behaviors are associated with less problem behavior (Herrenkohl, Hemphill, et al., 2012); thus, they are considered protective factors.

Effective parent and family-based programs focus on changing known risk and protective factors. By intervening early in family dynamics, one can affect more distal (later) factors that predispose adolescents to problem behaviors. For instance, parenting behavior impacts children's internal norms (i.e., the acceptability of certain behaviors), as well as their expectations for harm due to risky behavior, both of which are closely associated with adolescent problem behavior. Similarly, family dynamics have been shown to affect the selection of antisocial peers in adolescence; deviant peers are, in turn, highly predictive of children's own substance use, violence, and delinquency (Haggerty and Kosterman, 2012; Skinner et al., 2009). In short, improving parenting skills and the parent-child relationship in early childhood, middle childhood, and into the teen years can affect problem behaviors through diverse developmental paths.

For policymakers and practitioners interested in implementing family-based programs, the question remains of how to choose an appropriate program among those that are available. One criterion is theory. Programs that are theory driven have been shown to be better articulated, more focused, and therefore more effective (Fixsen et al., 2005). The programs reviewed here reinforce components of a theory known as the social development model (SDM; Catalano and Hawkins, 1996), which has considerable empirical support. The SDM

proposes that the relationship between a parent/caregiver and a child should provide five things in order to protect children from social, emotional, and behavioral problems and promote healthy development. The child must receive *(1) opportunities, (2) skills, (3) rewards for prosocial behavior, (4) bonding, and (5) clear expectations for behavior*. A child who has opportunities to engage in developmentally appropriate interactions and activities with adults in the home, the chance to develop new skills needed to succeed, and who is recognized and rewarded for positive behavior is more likely to feel bonded to the family. When children feel bonded to their family, they are motivated to live according to the family's expectations and rules, which are generally prosocial. Thus, by improving the five dynamics laid out in the SDM, one might expect fewer problem behaviors.

The second key criterion for choosing family-based programs is evidence of a program's efficacy. Programs that demonstrate efficacy have been called "evidence-based programs" (EBP). However, it is important to note that different types and levels of evidence for a program's efficacy may exist. For instance, there may be anecdotes of success by past participants, program implementers may experience progress first-hand, and surveys may even show that participants have improved in key skills or outcomes from start to the end of a program. All of these forms of evidence have some validity, yet they are not *systematic* in measuring and analyzing outcomes of interest for a specific population.

The scientific community generally agrees that only when programs have been rigorously tested through research designs such as randomized clinical trials or quasi-experimental methods can they be considered "evidence based." When properly designed and well executed, randomized trials and experimental research designs compare a group of individuals who participate in a program to a similar group of individuals who do not participate in order to isolate program effects. In this way, research can identify for whom certain programs work and under what circumstances (e.g., how exactly the program should be implemented). This standard of efficacy has been adopted by not only scientists, but also by large U.S. federal agencies that fund social programs and by institutions that specialize in EBPs.[1]

It is important to use programs that have been tested and proven effective, since not all programs have the positive outcomes that were intended. In fact, some programs have been found to make child and adolescent problem behavior worse. For example, research has consistently shown that peer group interventions with some at-risk youth *increase* risk for delinquency in adolescence and poor outcomes in adulthood (Dishion and Dodge, 2005; Dishion et al., 1999). As adults concerned with improving the well-being of children, we cannot afford to implement programs in our communities that have not reliably demonstrated positive outcomes.

Despite advances in prevention science, skills training programs are often unutilized. Each year in the United States, 56% of new expecting mothers attend birth classes to prepare for childbirth (Declercq et al., 2006), a process that will happen naturally. Yet, fewer parents begin their journey by learning about important parenting behaviors that can set their child on a positive and healthy trajectory. By the middle and high school years, even *fewer* parents participate in parenting or family programs unless they have difficulties with their child. By participating in tested and effective parenting programs, parents can make a positive difference in the lives of their children.

[1]See, for example, the U.S. Substance Abuse and Mental Health Services Administration, U.S. Department of Education, Office of Juvenile Justice and Delinquency Prevention, and Center for the Study and Prevention of Violence.

In this paper, we provide five examples of family-based EBPs that reduce family risk factors and increase family protective factors for child and adolescent problem behavior. We examine programs that can be implemented in early childhood: Nurse-Family Partnership; The Incredible Years; and Positive Parenting Program ("Triple P"); a program administered in middle childhood: Strengthening Families 10–14; and a program administered during the teen years: Staying Connected with Your Teen.[2] These programs are not intended to serve as an exhaustive list of family-based prevention programs, but offer examples of the types of skills that can be taught to families at various developmental stages and the outcomes that can be affected. For a robust list of evidence-based parenting and family programs, see Blueprints for Healthy Youth Development.[3]

This paper describes the basic format and skills taught by five EBPs. It then summarizes the research evidence for family risk and protective factors, as well as long-term outcomes such as substance use, delinquency, and educational outcomes. Finally, it provides a measure of cost savings that occur when a program is implemented. Prevention programs save money by avoiding negative outcomes that require costly services from community organizations and government agencies. For example, if a child is prevented from engaging in delinquent behaviors, the costs otherwise expended on law enforcement, juvenile justice institutions, and possibly treatment are averted. Likewise, if a child does not develop mental health problems or does not experience maltreatment, fewer resources will be expended on psychotherapeutic and social services, respectively. Prevention also promotes positive outcomes which lead to financial benefits. For instance, if, as a result of program participation, a child's educational achievement improves and they graduate from high school, they are more likely to be employed in a higher paying job, which will result in greater public contributions (i.e., higher taxes) and less utilization of public assistance. Economists have devised statistical models for monetizing the average costs and benefits of social programs, taking into account a diverse set of outcomes that may be impacted by these programs. Practitioners and policymakers who are interested in learning more about specific program characteristics or how to implement a program are referred to the appendix, which includes a list all program websites.

Nurse-Family Partnership (NFP) is an excellent example of a family program that works. Developed by Dr. David Olds, now at the University of Colorado, the program has been proven to prevent child abuse, neglect, and maternal arrest. It also reduced mothers' problems due to drug and alcohol abuse (Olds et al., 1998).

The program works with young, first-time, single mothers during their first pregnancy until their child is 2 years old. Mothers enrolled in Nurse-Family Partnership are visited by a registered nurse in their home at least once every other week, sometimes more often than that. The nurses work with the expecting mothers to reduce behaviors such as smoking, drinking, and drug use during pregnancy that may lead to poor birth outcomes. They also help the expecting mothers to identify potential signs of pregnancy complications.

After the child is born, nurses continue to work with mothers to recognize developmental or health problems and create safe environments for their children. In addition to helping mothers alleviate and cope with potential health issues of their child, the program also teaches mothers how to positively interact with their children in a way that promotes social and emotional competence. Mothers learn how to play with their children in

[2]The authors are affiliated with the Social Development Research Group, which tested Staying Connected with Your Teen; however, none of the authors receive financial remuneration for endorsement of the program or its utilization by others. The authors have no affiliation with the other programs reviewed here.

[3]www.healthyprograms.com

developmentally appropriate ways, how to use positive reinforcement, and how to develop strategies for dealing with difficult behaviors.

Note the elements of the social development strategy in the Nurse-Family Partnership program. The program increases opportunities for infants to interact with their mothers in positive ways, helps both the young mothers and the children learn skills for positive interactions, and teaches young mothers to reinforce positive behaviors in their children. These elements build strong bonds between mothers and their infants. The nurses also help the mothers to develop goals for themselves, such as going back to school or finding a good job. Positive behavior, positive goals, and successful outcomes are the hallmarks of this program.

The Evidence—Studies have found that the program was most effective for first-time mothers under the age of 22 years (Olds et al., 2004). These mothers showed 44% fewer problems due to alcohol and drug use (Olds et al., 1998). These effects have been found both when participating women's children were 6 years old and 12 years old. Mothers participating in the program also had 31% fewer subsequent births than mothers who did not have the nurse visits and reported they had longer romantic relationships. Mothers in the program had fewer months spent on welfare and using food stamps than women who were not enrolled in NFP (Olds et al., 2004)

The program has demonstrated an impact on participating children's delinquency, criminal justice involvement, and substance use behavior, even in adolescence. Children of mothers who participated in the program have 60% fewer instances of running away from home and 56% fewer days of alcohol consumption by the time they reach age 15 years compared to a no-treatment control group (Olds et al., 1998). Recent findings suggest that NFP also has an impact on criminal justice involvement for girls (Eckenrode et al., 2010). Girls involved in the program are less likely to experience an arrest or conviction by 19 years of age than girls who were not involved in the program. Evidence-based parenting programs like Nurse-Family Partnership also save money. According to a detailed cost-benefit analysis of the program, for every dollar spent, the Nurse-Family Partnership program saves $2.37 by reducing the amounts needed for the juvenile justice system, law enforcement, substance abuse treatment, and unemployment (Aos et al., 2012; Lee et al., 2012).

Positive Parenting Program (Triple P)

Dr. Matthew Sanders, a clinical psychologist, recognized that different communities and families need different levels of parenting intervention; therefore, along with his colleagues he developed a flexible system of parenting programs called the Positive Parenting Program (Triple P). Growing out of Sanders' early work with children as a graduate student in psychology at the University of Queensland, in Australia, Triple P has evolved to become a worldwide network accessed by millions of parents and involving large-scale trials and evaluations of its impacts. The program now encompasses an integrated network in 21 countries and four universities: the University of Queensland, the University of South Carolina in the U.S., the University of Manchester in England, and the University of Glasgow in Scotland.

The program has five different levels that vary in breadth and depth. The intent of the program is to promote positive parenting and reduce the risk of child abuse and neglect, risk factors for later adolescent problem behaviors. Each level of the Triple P system focuses on five main goals: promoting safe and engaging environments, creating positive learning environments, using effective discipline, creating clear and reasonable expectations, and self-care for parents. Earlier levels target large audiences with general information, while

later levels work with parents already experiencing problems by using more intensive interventions.

Elements of the social development strategy come alive for parents by providing opportunities for positive interaction between parents and children; teaching skills through modeling; and teaching parents how to reinforce positive behavior, set clear rules and consequences in advance for violating them, and build strong bonds of affection in the family.

The ability of the program to provide both breadth and depth, where needed, allows families to receive more tailored interventions and saves communities money by reducing unnecessary services. Most Triple P levels can also be modified for groups, one-on-one settings, or to be self-taught—which may also reduce the cost of implementing the program.

Level One is designed to reach a large audience. At this level, the program uses marketing strategies to disseminate information about parenting issues and child development. For example, a variety of media forms may be used to deliver parenting messages, including radio campaigns or television series.

Level Two builds upon the first level and distributes additional information through primary care physicians and other service providers that have direct contact with caregivers and their children. Through brief sessions, primary care personnel offer psychoeducation and referrals for issues that caregivers may have with their children. The session can also be supplemented with tip sheets, resources, or other information. A more intensive version of Level Two Triple P may also use the Triple P Seminar Series which consists of three 90-minute sessions: The Power of Positive Parenting; Raising Confident, Competent Children; and Raising Resilient Children. A portion of each seminar is devoted to responding to parents' questions.

Levels Three through Five are more intensive approaches that generally focus on children with mild to severe behavioral problems. Level Three, for example, is administered to parents of children with mild or moderate behavioral issues. The counseling intervention occurs in four short sessions, consisting of issue-specific psychoeducation and parent skills training, with tip sheets for parents. Level Four is intended for caregivers whose children display moderate to serious behavioral problems, thus it provides more and longer sessions than the previous level. As is typical of interventions for serious behavioral issues, parents are taught key skills through modeling, rehearsal, and self-evaluation. The parents also engage in supervised practice of the skills with their child either at home or in a clinic setting. Sessions last from 8 to 10 weeks.

If participants in Level Four continue to experience behavioral problems, such as adolescent delinquency or substance use, they are referred to Level Five, where they receive supplemental family intervention.

The Evidence—Triple P's flexible approach to helping families and a strong evidence base has made it a success in multiple countries and in multiple languages. A number of controlled trials have focused on the effects of specific Triple P components. Both the Level Four group parenting program and Level Four individual self-directed parenting program for families of children with challenging behavior problems in early childhood have shown positive effects on parent-reported child disruptive behavior disorder symptoms across multiple studies (Morawska and Sanders, 2006; Plant and Sanders; Sanders, 1999; Sanders et al., 2004; Sanders et al., 2002; Turner and Sanders, 2006). While Triple-P has multiple studies indicating significant evidence, a recent meta-analysis (Wilson et al., 2012)

determined that while there was evidence of significant effect sizes for maternal reports of problem behaviors, the effects were not long lasting and were not reported by neutral observers or fathers. Additionally, more recent studies replicating the Level 4 program find no clear pattern of effect of the program on child behavioral outcomes (Heinrichs et al., 2013; Little et al., 2012; Malti et al., 2011).

One question is whether implementation of the Triple P system can make a community-level impact. A randomized trial involving 18 counties in South Carolina assigned either to receive Triple P or no Triple P found that when the Triple P system was made available to parents county wide in a variety of formats and organizational settings, substantiated cases of child maltreatment for children up to 8 years old were 22% lower in the counties that received Triple P than in control counties. This is an important risk factor for later adolescent problem behaviors. Out-of-home placements decreased in the Triple P counties but increased in the control counties and were 16% higher in control counties than in experimental counties after Triple P. Another important finding was a reduction in child visits to emergency rooms and admissions to hospitals for injuries due to child maltreatment in the Triple P counties, while, during the same time period, child maltreatment injuries in the control counties increased (Prinz et al., 2009).

Another recent study examining community-wide implementation of Triple P was conducted in Australia, where diverse community sectors, such as practitioners, schools, social workers, counselors, etc., delivered all levels of Triple P (Sanders et al., 2008). This study found that caregivers in Triple P communities reported significant reductions in child emotional problems 2 years after the program was implemented: participating communities showed a decrease from 15.3% to 12.6% of children in the clinical range of emotional problems. Caregivers also reported a reduction in emotional and behavioral problems from 13.9% of children being in the clinical range for emotional and behavioral problems to 10.9% of children in the clinical range after Triple P was implemented. Such wide-ranging effects on children and adults result in important cost savings. Recent estimates suggest that for every dollar spent on the Triple P system, $6.06 in savings may be realized (Lee et al., 2012).

The Incredible Years, developed by Dr. Carolyn Webster-Stratton, is a multicomponent program that has shown positive effects with a wide variety of families in diverse settings. They include low-income families, middle-income families, and African American, Latino, Asian American, and White families. The Incredible Years encompasses eight programs that target parents, children, and even teachers. The basic and advanced program for early childhood works with parents of children ages three to 6 years. The program uses videotapes and group interactions to teach children, parents, and teachers skills and strategies for handling difficult situations.

Central to the program is an emphasis on creating opportunities for active involvement, teaching skills, reinforcing positive behavior, and setting clear limits. These are all central to the social development strategy. The parent training program focuses on four main program areas: strengthening children's social skills, emotion regulation, and school readiness; teaching parents to use praise and incentives to encourage cooperative behavior; establishing rules, routines, and effective limit setting; and handling misbehavior (Reid et al., 2001; Webster-Stratton et al., 2001). The Incredible Years parent training sessions generally include 22 two-hour group-facilitated sessions over a minimum of 12 weeks. The sessions are reinforced by home practice activities. A companion child's program, the Dinosaur School Program, includes 22 weekly therapist-led group sessions. Typically, the groups consist of six to seven children with serious behavior problems. The focus of the group is to

help children develop social and life skills such as problem solving, making friends, and cooperating with teachers, parents, and other children (Reid et al., 2001).

The Evidence—Over the past 25 years, Webster-Stratton's team has conducted six randomized controlled studies evaluating outcomes of the parenting program on children's behaviors. In addition, there have been six independent evaluations from implementation in a dozen different countries. Together, these studies provide strong evidence that the program improves parenting skills and children's behavior for up to 3 years after program participation on important risk factors for adolescent problem behaviors. Parents who had received this parenting program reported fewer behavioral problems and increased positive behaviors (e.g. following expectations) of their children at 3-year follow up, with 54% of the mothers and 75% of the fathers rating their child's behavior as having improved (Webster-Stratton, 1990). Replications of this program have also found strong effects on decreasing negative parenting behaviors, increasing positive child behaviors, and strengthening parent-child relationships (Little et al., 2012). The programs appear to have the strongest effects when they are combined. For example, whereas 95% of children in a combined intervention of the Parent BASIC program and Dinosaur School reported at least a 30% reduction in behavior problems, only 59% of children in parent training alone and 74% of children in child training alone indicated a 30% or more decrease in behavior problems (Webster-Stratton and Hammond, 1997). The program has demonstrated long-term effects into adolescence for parents of children who were experiencing conduct disorders when they were 3 to 8 years old (Webster-Stratton et al., 2011). For every dollar spent, the Incredible Years parenting program is estimated to save $1.20; when the child program is added, the savings do not decrease significantly ($1.14 for every dollar invested) (Lee et al., 2012).

Strengthening Families for 10- to 14-year-olds (formerly known as Iowa Strengthening Families Program) consists of seven 2-hour sessions that target both the youth and caregiver. Parents and youth meet separately for the first hour. During that time, they learn to identify risk factors for substance use, enhance parent-child bonding, monitor compliance with parent guidelines, provide appropriate consequences, manage anger and family conflict, and foster positive child involvement in family tasks. Consistent with the social development model, the program seeks to clarify expectations for behavior while promoting bonding by involving children in family decisions and teaching skills in a reinforcing environment. Youth engage in activities that target communication, problem solving, and resisting peer pressure. Parents and youth then come together and use a variety of games and activities to practice skills. The activities are specially designed to promote family involvement and bonding. The program has been used with various populations, including court-referred youth, families in low-income housing projects, churches, Native American groups, Asian families, and Spanish speaking families. The program has also been tested in an adaptation for rural African American families living in the South, called the Strong African American Families Program (Brody et al., 2004).

The Evidence—The Strengthening Families Program for 10- to 14-year-olds (SFP) has been successful in reducing initiation rates of substance use, reducing delinquent behavior, and increasing academic success in adolescence. In a 4-year follow-up of the impact of SFP, Spoth and colleagues (2001) found the program delayed initiation of alcohol, drunkenness, and cigarette and marijuana use in the 10th grade compared to a control group that did not get SFP. In addition, for those that did initiate, the program was found to reduce the frequency of alcohol and cigarette use compared to the control group (Spoth et al., 2001). The program has also been found to effectively reduce initiation of marijuana and other illicit drug use by the 12th grade (Spoth et al., 2009). The authors suggest that decreased uptake of illicit drug use among the group receiving SFP is likely the result of a "protective shield." Adolescents that took part in the program were less likely to experience exposure to

illicit drugs by the seventh grade, which led to less likelihood of using illicit drugs as high school seniors.

SFP has also been effective in reducing hyperactivity, aggressive behavior, and destructive behaviors in high school when compared to control groups (Spoth et al., 2000). Further, the program was found to increase school engagement in 8th grade and academic success, defined by school grades, in the 12th grade (Spoth et al., 2008; Spoth et al., 2002). Spoth and colleagues suggest that such long-term effects are the result of the program increasing parental competencies and reducing substance use-related risks (Spoth et al., 2008).

The Strong African American Families (SAAF) program found similar outcomes in delaying the onset of substance use by teens (Brody, Murry, Kogan, et al., 2006). The program found that, seven months after the SAAF program, youth involved in the program displayed more factors that would protect them from drug and alcohol use and abuse, such as having negative attitudes about alcohol and drugs, being goal directed, etc. Furthermore, the authors argued that these increases in child protective factors were a result of increases in communicative parenting practices (Brody et al., 2004). Later results suggest that these child protective factors predicted lower rates of alcohol initiation 2 years after the intervention (Brody, Murry, Chen, et al., 2006). Early cost-benefit analyses determined the long-term effects ranged from $7.80 to $9.60 for every dollar invested (Aos et al., 2004; Spoth et al., 2002). A recent analyses with updated assumptions by the Washington State Institute for Public Policy have estimated that for every dollar invested in SFP, the long-term financial benefit is about $0.65 (Aos et al., 2012).

Staying Connected with Your Teen (formerly known as *Parents Who Care)* was developed by Drs. J. David Hawkins and Richard F. Catalano to promote the social development process in families and to reduce risk factors in families with children 12 to 17 years of age to prevent risky sexual activity, drug use, and violent behavior. It was designed to include both parents and teens and is delivered either through seven workshop sessions or as a self-directed program used at home. The program includes an interactive video or DVD and a workbook based on the social development strategy.

Consistent with the social development strategy, the program features activities designed to provide teens with opportunities to contribute to their families and acquire the skills needed to take advantage of those opportunities, and increase parental monitoring, reduce harsh parenting, and use reward and recognition in order to promote bonding. The 108-page family workbook is written at an eighth-grade reading level, and a 117-minute video in 18 sections features Latino, African American, and White families.

The Evidence—A pilot study evaluated a group-administered curriculum only. It was tested using random assignment to experimental and waitlist control conditions. Analyses revealed the treatment group at posttest showed significantly lower poor family discipline, poor family supervision, and low parental commitment to school compared to controls. Family bonding also increased at posttest (Pollard, 1998). Overall, it appears that *Staying Connected* helped parents set strong norms with their teen against antisocial behavior while simultaneously improving the level of closeness within the family.

A randomized control trial was conducted from 2000–2005 to evaluate whether there were differences between the effects of a self-administered program compared to a parent-adolescent group-delivered program, and a no-treatment control group with a sample of White and Black families (Haggerty et al., 2007). Generally, both interventions demonstrated moderate reductions in teen attitudes about substance abuse and delinquency

compared to controls 2 years after families were assigned to the intervention group, and greater positive parenting skills.

In addition, the trial indicated that both intervention methods significantly increased youth use of condoms compared to the control condition. Sexually transmitted diseases were rare, but reported by four teens in the control group, compared to one in each of the intervention conditions. More notably however, is the significant reduction in initiation of risky behavior for Black teens in both interventions when compared to Black teens in the control group. The likelihood of initiation of alcohol, drugs, or sexual activity was reduced by almost 70% for Black teens in the self-administered condition compared to controls, and 75% for Black teens in the parent-adolescent group-delivered program compared to controls. Further, after 2 years, the frequency of violent behaviors among Black adolescents was reduced by 60% in the self-administered condition compared to the control group. Thus, this program seems to have particular promise for Black youth, and perhaps other minority populations. Although cost-benefit data for this program are unavailable, the self-administered program costs about 75% less to conduct than the parent and teen group program.

Conclusion

The prevention programs in this review have several qualities in common. They are all widely recognized as evidence-based programs (EBPs). They also stand on firm theoretical ground, which likely leads to key outcomes. These outcomes are further enhanced by keen attention to program fidelity among the developers and implementers of these programs. Below, we discuss each of these important qualities.

Strong Evidence for Programs

First and foremost, just as medications must be tested before they are approved for use, all of these psychosocial programs have been thoroughly tested in high-quality randomized trials or rigorous comparison group studies. All have demonstrated reductions in family risk factors (e.g., family conflict, favorable attitudes toward problem behaviors) and have shown improvements in family protective factors (e.g., guidelines and monitoring, parent-child attachment). In addition, some programs have revealed long-term outcomes among child participants, such as better high school success and lower rates of violent behavior and adolescent substance use.

The outcome studies presented in this review were carefully selected based on theory, rigor, and quality. We urge policymakers and practitioners to be critical about the type of evidence accepted as proof of a program's efficacy. Not all evidence is of equal value: only rigorous studies with a valid comparison group can definitively identify the effects of a particular intervention. For instance, children who undergo Program X may exhibit less substance use at the end of a program than the beginning. However, it is possible that as time passes and children mature, they naturally use fewer substances. Alternately, participants of Program X may have also participated in Program Y or experienced other changes, such as a large-scale school reform, at the same time. Without a tightly controlled comparison group, which only differs by its lack of participation in Program X, it is difficult to rule out alternate explanations and conclude that Program X led to better substance use outcomes.

The family-based EBPs reviewed here are illustrative, and are not exhaustive. These programs have been demonstrated to help a wide range of populations; however, there are also EBPs that target populations experiencing specific circumstances that place them at risk for problem behaviors. For instance, the New Beginnings Program helps children of divorced parents, and Families Facing the Future is intended for children of parents in substance abuse treatment.[4] Of course, there are also evidence-based *treatment* programs

for children who are already experiencing substance use or related problems, for example, Multisystemic Therapy (MST) and Functional Family Therapy (FFT).[5]

Theoretical Basis for Programs

The programs reviewed here are guided by sound theory, which is important for maintaining focus on the "active ingredients" of an intervention during its implementation. Such focus facilitates more efficient allocation of limited resources and more powerful impact on target outcomes. The social development model (SDM) is one theory that has gained considerable empirical support and can help practitioners organize their investment in family-based prevention programs. It proposes that families that have five key components are more likely to promote their child's positive adjustment. These components include: *(1) opportunities, (2) skills, (3) rewards, (4) bonding,* and *(5) clear expectations for behavior*. As new programs are being developed, these SDM components can serve to organize key intervention areas for parenting programs and positive youth development.

The EBPs discussed here seek to strengthen *opportunities* for interaction and involvement between caregivers and children by promoting communication, listening, and quality time together. In addition, these programs provide strategies and effective methods for learning and practicing new *skills* in safe environments. Importantly, parents are taught to *recognize and reward* their children's positive behaviors. By emphasizing improvements and accomplishments, parents shape child behavior toward prosocial goals. The opportunities, skills, and rewards described above lead to stronger *bonds* between parents and children; therefore, all programs encourage deeper familial connections through direct programming and continued application at home. Finally, these programs promote *clear expectations* for children's behavior by teaching parents how to articulate and consistently enforce their expectations. When such discipline is built on the foundation of strong family bonds, children are more likely to stay on the right track and correct themselves after mistakes.

Program Implementation Fidelity

Programs that have shown positive results with EBPs have taken great care to ensure program fidelity. Fidelity is "the faithful implementation of program components" (http://www.colorado.edu/cspv/blueprints/Fidelity.pdf). When program components are developed based on theory, it is expected that these specific components will be responsible for the observed outcomes. Presumably, these are the "active ingredients" of the intervention. However, if the correct protocols are not in place, if dosage is lacking (i.e., not enough sessions), or if appropriate professionals are not involved, the program's effectiveness can be compromised (Dane and Schneider, 1998). In fact, poor fidelity may even cause harm. For example, a study of Functional Family Therapy (FFT) with juvenile offenders showed that youth who were treated by therapists rated as "not competent" had worse recidivism outcomes than youth who received no intervention at all (Barnoski, 2002)! To avoid problems with program fidelity, all of the EBPs reviewed here provide training, manuals, monitoring protocols, and other materials to assist implementers.

Innovation in Programming

It is clear that the authors of this article – as well as the scientific community at large – place a high premium on programs that have been shown to work. Given the social and personal value of preventing adolescent problem behaviors, we believe that we cannot afford to expend limited resources on programs that have not demonstrated good outcomes. Thus, for

[4]New Beginnings Program: http://asupreventionresearch.com/; Families Facing the Future: http://www.sdrg.org/fffsummary.asp
[5]Multisystemic Therapy: http://mstservices.com/; Functional Family Therapy: http://www.fftinc.com/

widespread use in community settings, the most efficient investment is in programs that are evidence based. For programs that are theory based but as yet untested, efforts should be made to ensure implementation fidelity and strengthen evaluation evidence.

An emphasis on programs with evidence, however, does not preclude the need for continued innovation, development, and of course, evaluation. For instance, self-administration holds great promise for recruiting and maintaining participation in family-based prevention programs. Self-administration usually consists of providing materials (manuals, software, etc.) and brief staff contact (via phone or email) to guide families through the program. Such programs offer greater flexibility and convenience for family members. Because time and logistic considerations (e.g., transportation, child care) have been consistently shown to be the most important barriers to family-based program recruitment and retention (e.g., Spoth et al., 1996), self-administration offers a potential solution for many individuals. For example, an evaluation of *Staying Connected with Your Teen* found that 93% of families in the self-administered program chose to pursue the program compared to 78% in the site-based group program (Haggerty et al., 2006). Thus, significantly fewer resources were spent on staffing, with far greater rates of exposure to the program. The emergence of access to technology that includes access to video modeling of parenting skills holds promise for self-directed programs. Yet it must be recognized that, given that these programs offer flexibility because they are self-administered, they have the potential of diluting their impact.

As researchers, policymakers, and practitioners, we are all working towards a similar goal: to improve children's functioning, avoid problem behaviors, and increase well-being and productivity throughout the lifespan. Family-based prevention programs are uniquely positioned to intervene early by targeting powerful risk and protective factors in the development of psychosocial problems. Today, due to the collaborative contributions of scientists and clinicians, we have a menu of options for effective family-based prevention programs. By implementing them with fidelity in our respective communities, we have the unprecedented opportunity to improve the lives of many individuals.

We know what parenting and family programs work; we know what parents can do to make sure their children have the best opportunities for success; and we know what works to get children back on track if and when they are derailed. It is important that we share this information with as many parents as possible and allow our communities to prosper with effective programs that lead to strong families; successful, independent, caring children; and stronger communities.

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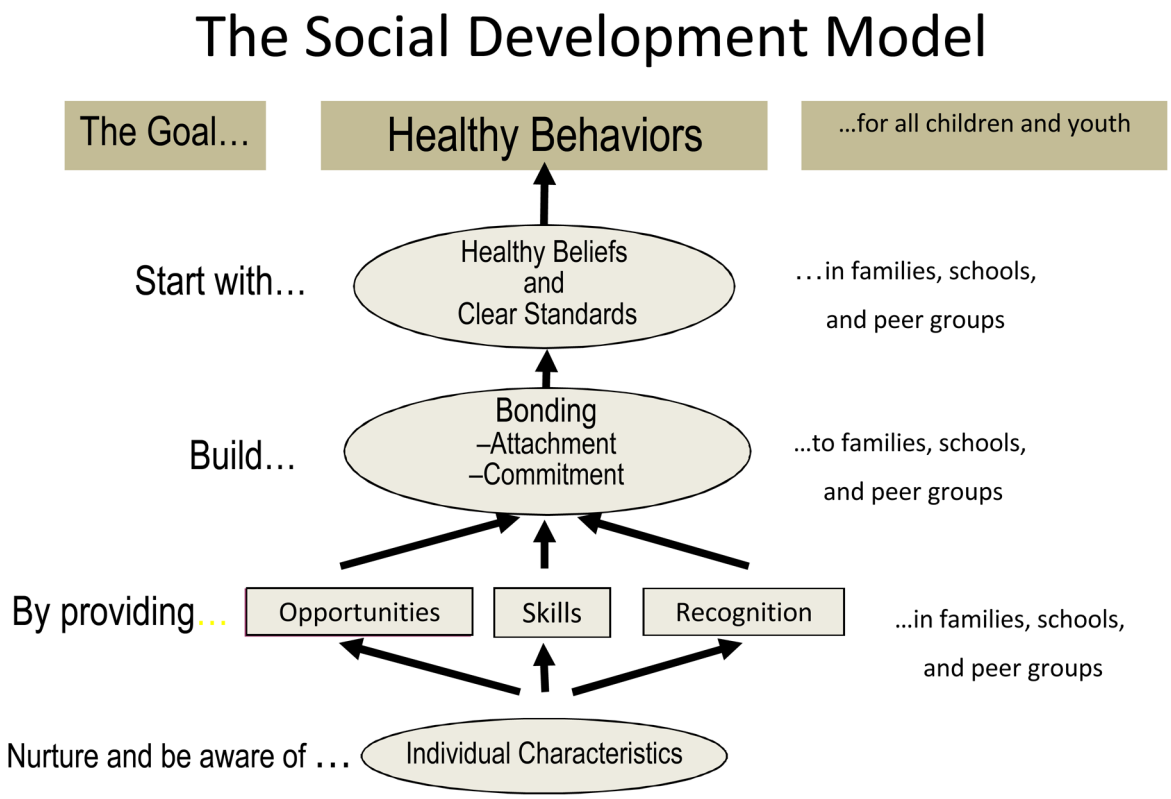

Figure 1.
The Social Development Model