Positive Youth Development in the United States: Research Findings on Evaluations of Positive Youth Development Programs

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This article summarizes a much lengthier one that appeared in *Prevention and Treatment*. The earlier article grew out of a project initiated by the Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation. The Positive Youth Development Evaluation project described why policy makers, practitioners, and prevention scientists advocated a shift in approach for how youth issues are addressed in this country. The Positive Youth Development Evaluation project sought to define how youth development programs have been defined in the literature and then to locate, through a structured search, strong evaluations of these programs and summarize the outcomes of these evaluations. In the current article, we explain why prevention has shifted from a single problem focus to a focus on factors that affect both positive and problem youth development, describe what is meant by positive youth development, and summarize what we know about the effectiveness of positive youth development programs.

Keywords: positive development; intervention; prevention; youth

With the twentieth century's discovery of childhood and adolescence as special periods in which children should be given support to learn and develop, American society assumed an increased sense of responsibility for the care of its young people. Increases in juvenile crime and concerns about troubled youth

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led in the 1950s to the beginning of major federal funding initiatives to address these issues. These trends accelerated during the 1960s, as did national rates of poverty, divorce, out-of-wedlock births, family mobility, and single parenthood.

Changes in socialization forces that have historically nurtured the development of children—especially in the family—necessitate reconceptualization of school and community practices to support the family in its mission to raise successful children (Weissberg and Greenberg 1997).

At first, interventions to support families and children were primarily responses to existing crises. Their focus was on reducing juvenile crime, or transforming poor character in youth. As the nation watched youth problems become more prevalent, intervention and treatment for a wide range of specific problems were developed. In the last three decades, both services and policies designed to reduce the problem behaviors of troubled youth have expanded. The effectiveness of these approaches has been extensively examined in a variety of research studies on substance abuse, conduct disorders, delinquent and antisocial behavior, academic failure, and teenage pregnancy (cf. Agee 1979; Clarke and Cornish 1978; Cooper et al. 1983; De Leon and Ziegenfuss 1986; Friedman and Beschner 1985; Gold and Mann 1984).

Prevention approaches began to emerge three decades ago, with an emphasis on supporting youth before problem behaviors occurred. Increasingly, investigators and practitioners in the field sought to address the circumstances (families, schools, communities, peer groups) of children's lives. Often based on earlier treatment efforts, most prevention programs initially focused on the prevention of a single problem behavior.

Prevention of problem behavior has undergone its own evolution since its inception. Many early prevention programs were not based on theory and research

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on child development. Prevention strategies changed as programs were evaluated, particularly as some approaches failed to show positive impact on youth drug use, pregnancy, sexually transmitted disease, school failure, or delinquent behavior (cf. Ennett et al. 1994; Kirby et al. 1989; Malvin et al. 1984; Mitchell DiCenso et al. 1997; Snow, Gilchrist, and Schinke 1985; Thomas et al. 1992)

A key turning point in the field occurred as investigators and service providers began incorporating information from longitudinal studies that identified important predictors of problem behaviors in youth. A second generation of prevention efforts sought to use this information on predictors to interrupt the processes leading to specific problem behaviors. For example, drug abuse prevention programs began to address empirically identified predictors of adolescent drug use, such as peer and social influences to use drugs and social norms that condone or promote such behaviors (cf. Ellickson and Bell 1990; Flay et al. 1988; Pentz, Dwyer, et al. 1989; Pentz, MacKinnon, et al. 1989). These prevention efforts were often guided by theories about how people make decisions, such as the Theory of Reasoned Action (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975; Morrison et al. 1994) and the Health Belief Model (Janz and Becker 1984; Rosenstock, Strecher, and Becker 1988).

In the 1980s, prevention efforts that focused only on a single problem behavior came under increasing criticism. The dominant prevention models were urged to examine the co-occurrence of problem behaviors within a single child and the common predictors of multiple problem behaviors. Investigators were also encouraged to incorporate valuable knowledge about environmental predictors and interactions between the individual and the environment. Furthermore, many advocated a focus on factors that promote positive youth development, in addition to focusing on preventing problems. Such concerns, expressed by prevention practitioners, policy makers, and prevention scientists, helped expand the design of prevention programs to include components aimed at promoting positive youth development. Consensus began to develop that a successful transition to adulthood requires more than avoiding drugs, violence, school failure, or precocious sexual activity. The promotion of children's social, emotional, behavioral, and cognitive development began to be seen as key to preventing problem behaviors themselves (W. T. Grant Consortium 1992).

In the 1990s, practitioners, policy makers, and prevention scientists adopted a broader focus for addressing youth issues (Pittman, O'Brien, and Kimball 1993). There is a growing body of research on the developmental etiology of problem and positive behaviors (Hawkins, Catalano, and Miller 1992; Kellam and Rebok 1992; Newcomb, Maddahian, and Bentler 1986) and comprehensive outcome reports from rigorous randomized and nonrandomized controlled trials of positive youth development programs (e.g., Greenberg 1996; Greenberg and Kusche 1997; Hahn, Leavitt, and Aaron 1994; Weissberg and Caplan 1998). Policy makers, practitioners, and prevention scientists are now converging in their focus on the developmental precursors of both positive and negative youth development.

Youth development practitioners, the policy community, and prevention scientists have reached the same conclusions about promoting better outcomes for

youth. They call for expanding programs beyond a single-problem-behavior focus and for considering program effects on a range of positive and problem behaviors. Prevention science provides empirical support for this position through substantial evidence that many youth outcomes, both positive and negative, are affected by the same risk and protective factors. These groups are also calling for interventions that involve several social domains. The evidence that risk and protective factors are found across family, peer, school, and community environments supports this approach. Both positive youth development advocates and prevention scientists now encourage attention to the importance of social and environmental factors that affect the successful completion of developmental tasks. This convergence in thinking has been recognized in forums on youth development including practitioners, policy makers (Pittman and Fleming 1991; Pittman 1991), and prevention scientists (National Research Council Institute of Medicine 2002; National Research Council Institute of Medicine, Chalk, and Phillips 1996; Weissberg and Greenberg 1997) who have advocated that models of healthy development hold the key to both health promotion and health prevention of problem behaviors. A sound theoretical basis for this assumption is needed. We must better understand the mechanisms through which different risk and protective factors influence positive youth development and problem behavior. Such theoretical and empirical tasks are beyond the scope of this article.

While some work has begun in this area (Blechman, Prinz, and Dumas 1995; Catalano, Berglund, et al. 2002; Cichetti and Cohen 1995; Dryfoos 1997; Durlak 1998; Greenberg, Domitrovich, and Bumbarger 2001; Greenberg and Weissberg 2001; Kellam and Rebok 1992; Kirby et al. 1991; Lerner 2000; Mrazek and Haggerty 1994; Perry et al. 1996; Pittman and Fleming 1991; Seligman 2001), much remains to be accomplished.

We are finding new evidence that offers an empirical demonstration of why increasing positive youth development outcomes is likely to prevent problem behavior. This evidence demonstrates that the same risk and protective factors that studies have shown predict problem behaviors are also important in predicting positive outcomes (Catalano, Hawkins, et al. 2002; Pollard, Hawkins, and Arthur 1999). Given this similar etiological base, it is likely that decreasing risk and increasing protection is likely to affect both problem and positive outcomes.

Positive Youth Development Constructs

Through literature review, consultation with the assistant secretary for planning and the evaluation staff, and a consensus meeting of leading scientists, an operational definition of *positive youth development* was created. Positive youth development programs are approaches that seek to achieve one or more of the following objectives:

1. Promotes bonding
2. Fosters resilience

3. Promotes social competence
4. Promotes emotional competence
5. Promotes cognitive competence
6. Promotes behavioral competence
7. Promotes moral competence
8. Fosters self-determination
9. Fosters spirituality
10. Fosters self-efficacy
11. Fosters clear and positive identity
12. Fosters belief in the future
13. Provides recognition for positive behavior
14. Provides opportunities for prosocial involvement
15. Fosters prosocial norms.

These constructs are described below.

Promotes bonding

Bonding is the emotional attachment and commitment a child makes to social relationships in the family, peer group, school, community, or culture. Child development studies frequently describe bonding and attachment processes as internal working models for how a child forms social connections with others (Ainsworth et al. 1978; Bowlby 1973, 1979, 1982; Mahler, Pine, and Bergman 1975). The interactions between a child and a child's caregivers build the foundation for bonding that is key to the development of the child's capacity for motivated behavior. Positive bonding with an adult is crucial to the development of a capacity for adaptive responses to change and for growth into a healthy and functional adult. Good bonding establishes the child's trust in self and others. Inadequate bonding establishes patterns of insecurity and self-doubt. Very poor bonding establishes a fundamental sense of mistrust in self and in others, creating an emotional emptiness that the child may try to fill in other ways, possibly through drugs, impulsive acts, antisocial peer relations, or other problem behaviors (Braucht, Kirby, and Berry 1978; Brook et al. 1990; Kandel, Kessler, and Margulies 1978).

The importance of bonding reaches far beyond the family. How a child establishes early bonds to caregivers will directly affect the manner in which the child later bonds to peers, school, the community, and culture. The quality of a child's bonds to these other domains are essential aspects of positive development into a healthy adult (Brophy 1988; Brophy and Good 1986; Dolan, Kellam, and Brown 1989; Hawkins, Catalano, and Miller 1992). Strategies to promote positive bonding combined with the development of skills have proven to be an effective intervention for adolescents at risk for antisocial behavior (Caplan et al. 1992; Dryfoos 1990).

Fosters resilience

Resilience is an individual's capacity for adapting to change and to stressful events in healthy and flexible ways. Resilience has been identified in research studies as a characteristic of youth who when exposed to multiple risk factors, show suc-

cessful responses to challenges and use this learning to achieve successful outcomes (Hawkins, Catalano, Morrison, et al. 1992; Masten, Best, and Garmezy 1990; Rutter 1985; Werner 1989, 1995). The National Research Council Institute of Medicine, Chalk, and Phillips (1996, p. 4) defined *resilience* as "patterns that protect children from adopting problem behaviors in the face of risk."

Promotes competencies

The positive youth development construct of competence covers five areas of youth functioning, including social, emotional, cognitive, behavioral, and moral competencies.

The multiple dimensions of competence began to be recognized in the past two decades (Gardner 1993; Zigler and Berman 1983). More recently, Weissberg and Greenberg (1997) urged that competence should be viewed and measured in research studies as a developmental outcome. While the enhancement of competence can help to prevent other negative outcomes (Botvin et al. 1995), competence can be specified and measured as an important outcome itself, indicative of positive development.

In recent years, many competence promotion efforts have sought to develop skills to integrate feelings (emotional competence) with thinking (cognitive competence) and actions (behavioral competence) to help the child achieve specific goals.

Social competence. Social competence is the range of interpersonal skills that help youth integrate feelings, thinking, and actions to achieve specific social and interpersonal goals (Caplan et al. 1992; Weissberg, Caplan, and Sivo 1989). These skills include encoding relevant social cues; accurately interpreting those social cues; generating effective solutions to interpersonal problems; realistically anticipating consequences and potential obstacles to one's actions; and translating social decisions into effective behavior (Consortium on the School-Based Promotion of Social Competence 1994).

Kornberg and Caplan (1980), who reviewed 650 papers on biopsychosocial risk factors and preventive interventions, concluded that competence training to promote adaptive behavior and mental health is one of the most significant developments in recent primary prevention research. In general, social competence promotion programs were designed to enhance personal and interpersonal effectiveness and to prevent the development of maladaptive behavior through (1) teaching students developmentally appropriate skills and information, (2) fostering prosocial and health-enhancing values and beliefs, and (3) creating environmental supports to reinforce the real-life application of skills (Weissberg, Caplan, and Sivo 1989). To produce meaningful effects on specific target behaviors, it also appears necessary to include opportunities in social competence promotion programs for students to practice and apply learned skills to specific, relevant social tasks (Hawkins and Weis 1985).

Emotional competence. Emotional competence is the ability to identify and respond to feelings and emotional reactions in oneself and others. Salovey and Mayer (1989) identified five elements of emotional competence, including knowing one's emotions, managing emotions, motivating oneself, recognizing emotions in others, and handling relationships. The W. T. Grant Consortium on the School-Based Promotion of Social Competence (1992, p. 136) provided a list of emotional skills that are ingredients of many prevention programs: "identifying and labeling feelings, expressing feelings, assessing the intensity of feelings, managing feelings, delaying gratification, controlling impulses, and reducing stress." Goleman (1995) proposed empathy and hope as components of emotional intelligence.

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Cognitive competence. Cognitive competence includes two overlapping but distinct subconstructs. The W. T. Grant Consortium (1992, p. 136) defined the first form of cognitive competence as the "ability to develop and apply the cognitive skills of self-talk, the reading and interpretation of social cues, using steps for problem-solving and decision-making, understanding the perspective of others, understanding behavioral norms, a positive attitude toward life, and self awareness."

The second aspect of cognitive competence is related to academic and intellectual achievement. The emphasis here is on the development of core capacities including the ability to use logic, analytic thinking, and abstract reasoning.

Behavioral competence. Behavioral competence refers to effective action. The W. T. Grant Consortium (1992, p. 136) identified three dimensions of behavioral competence: "nonverbal communication (through facial expressions, tone of voice, style of dress, gesture or eye contact), verbal communication (making clear

requests, responding effectively to criticism, expressing feelings clearly), and taking action (helping others, walking away from negative situations, participating in positive activities)."

Moral competence. Moral competence is a youth's ability to assess and respond to the ethical, affective, or social-justice dimensions of a situation. Piaget (1952, 1965) described moral maturity as both a respect for rules and a sense of social justice. Kohlberg (1963, 1969, 1981) defined moral development as a multistage process through which children acquire society's standards of right and wrong, focusing on choices made in facing moral dilemmas. Hoffman (1981) said that the roots of morality are in empathy, or empathic arousal, which has a neurological basis and can be either fostered or suppressed by environmental influences. He also asserted that empathic arousal eventually becomes an important mediator of altruism, a quality that many youth interventions try to promote in young people.

Fosters self-determination

Self-determination is the ability to think for oneself and to take action consistent with that thought. Fetterman, Kaftarian, and Wandersman (1996) defined *self-determination* as the ability to chart one's own course. Much of the literature on self-determination has emerged from work with disabled youth (Brotherson et al. 1995; Field 1996; Sands and Doll 1996; Wehmeyer 1996) and from cultural-identity work with ethnic and minority populations (Snyder-Joy 1994; Swisher 1996). While some writers expressed concern that self-determination may emphasize individual development at the expense of group-oriented values (Ewalt and Mokuau 1995), others linked self-determination to innate psychological needs for competence, autonomy, and relatedness (Deci and Ryan 1994).

Fosters spirituality

A search of the literature across the various disciplines associated with positive youth development did not produce a definition of spirituality appropriate to this review. To capture components of either religiosity or nontraditional forms of applied spiritual practice, *spirituality* is defined here as "relating to, consisting of, or having the nature of spirit; concerned with or affecting the soul; of, from, or relating to God; of or belonging to a church or religion" (Berube et al. 1995). The construct of spirituality has been associated in some research with the development of a youth's moral reasoning, moral commitment, or belief in the moral order (Hirschi 1969; Stark and Bainbridge 1997). Recent reviews of the relationship between religiosity and adolescent well-being found that religiosity was positively associated with prosocial values and behavior and negatively related to suicide ideation and attempts, substance abuse, premature sexual involvement, and delinquency (Benson 1992; Benson, Donahue, and Erickson 1989; Donahue and Benson 1995).

Fosters self-efficacy

Self-efficacy is the perception that one can achieve desired goals through one's own actions. Bandura (1989, p. 1175) stated that "self-efficacy beliefs function as an important set of proximal determinants of human motivation, affect, and action. They operate on action through motivational, cognitive, and affective intervening processes." Strategies associated with self-efficacy beliefs include personal-goal setting, which is influenced by self-appraisal of one's capabilities (Bandura 1986, 1993). Others have documented that the stronger the perceived self-efficacy, the higher the goals people set for themselves and the firmer their commitment to them (Locke et al. 1984).

Fosters clear and positive identity

Clear and positive identity is the internal organization of a coherent sense of self. The construct is associated with the theory of identity development emerging from studies of how children establish their identities across different social contexts, cultural groups, and genders. Identity is viewed as a "self-structure," an internal, self-constructed, dynamic organization of drives, abilities, beliefs, and individual history, which is shaped by the child's navigation of normal crises or challenges at each stage of development (Erikson 1968). Erikson (1968) described overlapping yet distinct stages of psychosocial development that influence a child's sense of identity throughout life but that are especially critical in the first twenty years. If the adolescent or young adult does not achieve a healthy identity, role confusion can result. Developmental theorists assert that successful identity achievement during adolescence depends on the child's successful resolution of earlier stages.

Stages of identity development are linked to gender differences in preadolescence and adolescence, revealing a series of identity aspects for girls that are not parallel to those of boys (Gilligan 1982). Investigations of the positive-identity development of gay and bisexual youth have become a focus for some researchers (Johnston and Bell 1995). For youth of color, the development of positive identity and its role in healthy psychological functioning is closely linked with the development of ethnic identity (Mendelberg 1986; Parham and Helms 1985; Phinney 1990, 1991; Phinney, Lochner, and Murphy 1990; Plummer 1995), issues of bicultural identification (Phinney and Devich Navarro 1997), and bicultural or cross-cultural competence (LaFromboise, Coleman, and Gerton 1993; LaFromboise and Rowe 1983). Some have suggested that it is healthy for ethnic minority youth to be consciously socialized to understand the multiple demands and expectations of both the majority and the minority culture (Spencer and Markstrom Adams 1990; Spencer 1990). This process may offer psychological protection through providing a sense of identity that captures the strengths of the ethnic culture and that helps buffer experiences of racism and other risk factors (Hill, Piper, and Moberg 1994). This may also enhance prosocial bonding to adults who can help youths to counter potential interpersonal violence in their peer groups (Hill, Piper, and Moberg 1994; Wilson 1990).

Fosters belief in the future

Belief in the future is the internalization of hope and optimism about possible outcomes. This construct is linked to studies on long-range goal setting, belief in higher education, and beliefs that support employment or work values. "Having a future gives a teenager reasons for trying and reasons for valuing his life" (Prothrow-Stith 1991, 57). Research demonstrates that positive future expectations predict better social and emotional adjustment in school and a stronger internal locus of control, while acting as a protective factor in reducing the negative effects of high stress on self-rated competence (Wyman et al. 1993).

Provides recognition for positive behavior

Recognition for positive involvement is the positive response of those in the social environment to desired behaviors by youths. According to social learning theory, behavior is in large part a consequence of the reinforcement or lack of reinforcement that follows action. Behavior is strengthened through reward (positive reinforcement) and avoidance of punishment (negative reinforcement) or weakened by aversive stimuli (positive punishment) and loss of reward (negative punishment) (Akers et al. 1979; Bandura 1973). Reinforcement affects an individual's motivation to engage in similar behavior in the future. Social reinforcers have major effects on behavior. These social reinforcers can come from the peer group, family, school, or community (Akers et al. 1979).

Provides opportunities for prosocial involvement

Opportunity for prosocial involvement is the presentation of events and activities across different social environments that encourage youth to participate in prosocial actions. Providing prosocial opportunities in the nonschool hours has been the focus of much discussion and study (Carnegie Council on Adolescent Development 1992; Pittman 1991). For a child to acquire key interpersonal skills in early development, positive opportunities for interaction and participation must be available (Hawkins et al. 1987; Patterson, Chamberlain, and Reid 1982). In adolescence, it is especially important that youth have the opportunity for interaction with positively oriented peers and for involvement in roles in which they can make a contribution to the group, whether family, school, neighborhood, peer group, or larger community (Dryfoos 1990).

Fosters prosocial norms

Programs that foster prosocial norms seek to encourage youth to adopt healthy beliefs and clear standards for behavior through a range of approaches. These may include providing youth with data about the small numbers of people their age who use illegal drugs, so that they decide that they do not need to use drugs to be "normal"; encouraging youth to make explicit commitments in the presence of peers or

mentors not to use drugs or to skip school; involving older youth in communicating healthy standards for behavior to younger children; or encouraging youth to identify personal goals and set standards for themselves that will help them achieve these goals (Hawkins, Catalano, and Miller 1992; Hawkins, Catalano, Morrison, et al. 1992).

Evaluations of Positive Youth Development Programs

We undertook a systematic review of the literature both published and unpublished to find programs to include in the review that met the following criteria:

- Address one or more of the positive youth development constructs, as defined above.
- Involve youth between the ages of six and twenty. We felt that a number of high-quality reviews of youth development programs serving the younger-than-five range had already been completed (e.g., Yoshikawa 1994), so we focused on programs addressing youth at a later developmental stage that had been less well summarized.
- Involve youth not selected because of their need for treatment. Only programs for children in the general population or children at risk were included. Delinquency, drug-abuse, and mental-health treatment programs were excluded.
- Address at least one youth development construct in multiple socialization domains, address multiple youth development constructs in a single socialization domain, or address multiple youth development constructs in multiple domains. Programs that addressed a single youth development construct in a single socialization domain were excluded from this review.

In addition to these program criteria, the program's evaluation had to meet the following criteria to be included in this review. Complete description and operationalization of these inclusion criteria can be found in Catalano, Berglund, et al. (2002).

- Adequate Study Design and Outcome Measures
- Adequate Description of the Research Methodologies
- Description of the Population Served
- Description of the Intervention
- Description of Implementation
- Effects Demonstrated on Behavioral Outcomes

Our selection criteria of program and evaluation criteria produced a range of diverse youth programs for review, some of which may be described as positive youth development, some as promotion programs, and others as primary prevention. Readers may question how the label of *positive youth development* fits a particular program with a prevention focus. The goals of this project were to analyze what programs do and what their evaluations measure rather than to focus on how they were labeled. We found that a number of programs traditionally considered primary prevention interventions incorporated many of the same positive youth

development constructs as programs usually viewed as positive youth development programs. As will be demonstrated, many programs with a *primary prevention* label were in fact embedded with numerous positive youth development strategies and measured positive youth outcomes in addition to changes in problem behavior.

A total of 161 programs were identified as potentially within the scope of this review. Of these positive youth development programs, 77 had evaluations that appeared to meet the initial criteria for the analysis. The remaining 84 programs were not included for one of the following reasons: (1) no evaluation existed; (2) the evaluation contained no data beyond a narrative case study; (3) the study sample was an indicated population (symptomatic or in treatment); or (4) despite comprehensive efforts, adequate evaluation information could not be retrieved. Eight of the seventy-seven programs with evaluations were sufficiently limited by missing information and had to be removed from the review. Forty-four programs did not have adequate evaluations (thirty-nine) or did not have positive effects on behavioral outcomes (five). Twenty-five programs incorporated positive youth development constructs into universal or selective approaches, had strong evaluation designs (experimental or quasi-experimental with viable comparison groups), had an acceptable standard of statistical proof, provided adequate methodological detail to allow an independent assessment of the study's soundness, and produced evidence of significant effects on youth's behavioral outcomes.

Summary of Youth Development Program Outcomes

Program results are summarized in this section. More complete descriptions of the programs, research designs, and behavioral outcomes are available elsewhere (Catalano, Berglund, et al. 2002).

Single-domain programs

Eight positive youth development programs targeted a single social domain. Two of these, Big Brothers/Big Sisters and Bicultural Competence Skills, operated in the community domain. Six programs focused on children in the school domain: Growing Healthy, Know Your Body, Children of Divorce, Life Skills Training, The PATHS Project, and Project ALERT.

Both programs in the community domain used experimental research designs and random assignment of children to intervention and control groups. One, Bicultural Competence Skills, used a skill- and competence-based curriculum; the other, Big Brothers/Big Sisters, was a mentoring program without a skills component. Bicultural Competence Skills included follow-up results. Although Big Brothers/Big Sisters did not include long-term follow-up, it provided a sustained intervention exposure (eighteen months) and measurement period.

Both programs sought to build bonding, competence, and positive identity, but their approaches to promoting these constructs were very different. Each addressed healthy bonding relationships in its own way: Big Brothers/Big Sisters with adults and Bicultural Competence Skills through strengthening the bonds that bicultural children have to both majority and subgroup cultures. While Bicultural Competence Skills addressed competence directly through a skills-training curriculum, Big Brothers/Big Sisters took the approach that the primary mechanism of changes in competence (social, behavioral, emotional) are based on the development of a consistent adult-child bond in a mentoring relationship.

Both positive youth development advocates and prevention scientists now encourage attention to the importance of social and environmental factors that affect the successful completion of developmental tasks.

In both evaluations, program strategies had a measurable impact on students' outcomes. Positive youth outcomes included greater self-control, assertiveness, and healthy and adaptive coping in peer-pressure situations (Bicultural Competence Skills program) and improvements in school attendance, parental relations, academic performance, and peer emotional support (Big Brothers/Big Sisters). Problem behaviors were also reduced or prevented. Substance use was lower in the experimental groups for both interventions, and hitting, truancy, and lying were reduced as a result of participation in Big Brothers/Big Sisters.

The six positive youth development programs set in schools were divided into two types: three health-promotion-focused interventions and three competence-promotion-focused interventions. All six programs successfully incorporated positive youth development constructs and strategies and changed behavioral outcomes for children. In all six programs, the primary emphasis of the intervention was on children's acquisition of skill-based learning to produce the desired behavioral changes. Strategies in these programs relied on opportunities for children to absorb new information and knowledge and to practice specific skills (e.g., coping, decision making, self-management, frustration tolerance, impulse control, refusal/resistance, life skills, and academic mastery).

Five of the six programs (Growing Healthy, Know Your Body, Life Skills Training, The PATHS Project, and Project ALERT) were multiyear interventions; the

exception was a relatively short-term intervention (Children of Divorce) that used developmentally focused strategies to promote mental-health protective factors in a specific high-risk population (children of divorced parents). These programs all used a strong research design, with five of the six employing an experimental design and random assignment of children to intervention and control groups. In all three evaluations of the school-based competence promotion programs, long-term follow-up was designed into the evaluation framework, although only two of the three demonstrated continued effects at follow-up (PATHS and Life Skills Training). Although the health-promotion program evaluations did not include follow-up, two of the three (Growing Healthy and Know Your Body) were multiyear trials that provided sustained intervention exposure and measurement periods.

All programs produced evidence of significant changes in children's positive or problem behavior. Among the improvements in positive youth outcomes that resulted from these interventions were better personal health-management attitudes and knowledge (Growing Healthy) and health practices (Know Your Body, Growing Healthy); greater assertiveness, sociability, problem-solving, and frustration tolerance (Children of Divorce); increased acceptance of prosocial norms having to do with substance use (Life Skills Training and Project ALERT); increased interpersonal skills and decision making (Life Skills Training); and higher capacity for managing one's reactions and behavior in social and emotional situations, greater self-efficacy with creating new solutions to problems, and increased empathy (PATHS). These interventions also had a significant impact on the reduction or prevention of problem behaviors in children. One of the greatest areas of impact for several programs involved successfully changing knowledge, attitudes, and/or behavioral practices around cigarette smoking (Know Your Body, Growing Healthy, Life Skills Training and Project ALERT). Two single-domain programs also improved youth attitudes and practices around substance use and abuse (Life Skills Training and Project ALERT). Other favorable changes in youth problem behaviors included changes in aggressive and conflict behavior (PATHS).

Programs in two social domains

Eight programs combined two social domains or components. Seven effective youth development programs were conducted in combined family and school domains: the Child Development Project, Fast Track, Metropolitan Area Child Study, Reducing the Risk, the Seattle Social Development Project, the Social Competence Promotion Program for Young Adolescents, and Success for All. These programs successfully changed youth outcomes, promoted positive youth development constructs and strategies, and incorporated parent or family involvement. One program, Teen Outreach, combined school and community domains.

Seven school- and family-based effective youth development programs successfully changed youth outcomes, promoted positive youth development constructs and strategies in the school setting, and used a variety of methods to incorporate parent or family involvement. Five programs were multiyear interventions that

used strong quasi-experimental research designs; two used an experimental design (Fast Track and Metropolitan Area Child Study).

Positive youth development programs set in school and family domains typically promote competence within and bonding to the family while promoting these positive youth development constructs in the youth. The school is usually the primary setting for implementing youth strategies, while a combination of approaches is employed to engage the family. These include direct parent training or education strategies, often conducted at the school; program implementation strategies in the home setting to enhance the child's acquisition of new skills and learning (e.g., parent involvement in homework assignments generated from the school-based component, or home visits); or parental participation in the program design or organizational strategies. Metropolitan Area Child Study and Seattle Social Development Project used the first strategy, direct parent training. Child Development Project, Reducing the Risk, and Social Competence Promotion for Young Adolescents used the second parent strategy, bringing parents into the implementation of the program. Fast Track used the first two, training and home visits. Success For All used all three, training parents and involving them in both the implementation and the organizational aspects of the intervention.

Positive youth development programs set in schools and families generally tried to introduce youth development constructs into both settings. While the children are learning skills or other youth development strategies, parents are frequently the focus of efforts to foster family competence, parent self-efficacy, and bonding between child and family and between parent and intervention, and to promote prosocial norms in the family.

Each program produced evidence of significant changes in youth's positive or problem behavior. Improvements in positive youth outcomes included greater social acceptance by and collaboration with peers (Child Development Project; Fast Track); improved communication with parents and greater self-efficacy around contraceptive practices (Reducing the Risk); higher achievement and school attachment (Seattle Social Development Project); increased social acceptance by involvement and cooperation with peers and problem-solving and creative solutions (Social Competence Promotion Program); improved cognitive competence and academic mastery (Success for All); and improvements in acceptance of authority, classroom atmosphere and focus, and appropriate expression of feelings (Fast Track). These interventions also had a significant impact on the reduction or prevention of problem behaviors in children, including alcohol (Child Development Project and Seattle Social Development Project) and tobacco use (Child Development Project). Rates or frequency of delinquency or aggressive behavior decreased in four programs (Fast Track, Metropolitan Area Child Study, Seattle Social Development Project, and Social Competence Promotion Program). Youth attitudes and practices around contraception or initiation or prevalence of sexual activity were reduced in two programs (Reducing the Risk and Seattle Social Development Project).

Teen Outreach was conducted in combined school and community domains. This primarily school-based intervention promoted positive youth development

constructs and strategies in the school setting by providing community service opportunities for young people and produced positive behavioral outcomes on school performance and reduced teen pregnancy.

Programs in three social domains

Nine effective programs combined their strategies across three settings. Seven programs were conducted in combined family, school, and community domains: Across Ages, Adolescent Transitions Project, Midwestern Prevention Project, Project Northland, Responding in Peaceful and Positive Ways, Valued Youth Partnership, and Woodrock Youth Development Project. These multiple-domain programs promoted positive youth development strategies in school, incorporated parent or family involvement, and used community strategies or settings. One program, Creating Lasting Connections, combined family, church, and community, and another program, Quantum Opportunities, combined school, workplace, and community.

The family-school-community programs promoted positive youth development constructs and strategies across the three domains, incorporated parent or family involvement, and used resources or opportunities from the local communities in which the children lived. Five of the seven programs (Across Ages, Adolescent Transitions, Project Northland, Responding in Peaceful and Positive Ways, and Woodrock) used experimental research designs, while two used quasi-experimental designs.

The school-family-community interventions were frequently based in schools and used the school component strategically to tie in the family and the community components. These programs typically placed emphasis on the careful integration and monitoring of individual and group strategies across all three domains. Programs generally tried to introduce protective factors into all three settings. While the children were taught skills, or other youth development strategies were addressed in the program's youth development framework, parents were the focus of efforts to bolster family competence, parent self-efficacy, bonding, and alignment with prosocial norms, and local communities were the focus of efforts to use community assets, resources, and partnerships to enhance the success of the other strategies. In ways similar to those described in the school- and family-domain programs, parents in these programs were typically engaged either through direct parent training or involvement in program implementation or organization. As in the school-community-domain programs, these interventions incorporated communities through either through using their social, economic, or physical resources or through targeting specific community risk factors, or attempting to influence community-level policies and practices. More than half of these programs (Across Ages, Midwestern Prevention Project, Valued Youth Partnerships, Woodrock) emphasized the development of strategic relationships or partnerships with the community.

These programs produced improvements in positive youth outcomes including more positive attitudes about older people and higher levels of community service

(Across Ages); higher levels of social skills learning (Adolescent Transitions) and school attendance (Across Ages); greater self-efficacy with respect to substance-use refusal (Project Northland); higher reading grades and cognitive competence (Valued Youth Partnerships); and improvements in race relations and perceptions of others from different cultural or ethnic groups (Woodrock). These interventions also had a significant impact on the reduction or prevention of problem behavior in

Although a broad range of strategies produced these results, the themes common to success involved methods to strengthen social, emotional, behavioral, cognitive, and moral competencies; build self-efficacy; shape messages from family and community about clear standards for youth behavior; increase healthy bonding with adults, peers, and younger children; expand opportunities and recognition for youth; provide structure and consistency in program delivery; and intervene with youth for at least nine months or longer.

children. Four programs changed attitudes and practices related to substance use (Across Ages, Midwestern Prevention Project, Project Northland, and Woodrock). One program successfully changed negative family interaction patterns and reduced levels of family conflict (Adolescent Transitions). Two programs reduced either school suspension or drop-out rates (Responding in Peaceful and Positive Ways and Valued Youth Partnerships). Two programs reduced aggressive and violence-related behaviors and/or attitudes (Adolescent Transitions, Responding in Peaceful and Positive Ways). Three programs reduced levels of cigarette, marijuana, and/or alcohol use (Midwestern Prevention Project, Project Northland, Woodrock).

Creating Lasting Connections, an intervention in the family, church, and community social domains, addressed fourteen positive youth development constructs including social, emotional, cognitive, behavioral, and moral competencies; and bonding, resiliency, self-efficacy, spirituality, recognition for positive behavior, positive identity, prosocial norms, opportunities for prosocial involvement, and self-determination. Evaluators also noted the teaching of cultural competence in the interventions. Intervention youth were significantly more likely to use community services as needed when personal or family problems arose, to take more action based on the service contact, and to perceive that the action accomplished something helpful.

The Quantum Opportunities Program, a program in the school, workplace, and community domains, addressed thirteen positive youth development constructs including social, emotional, behavioral, and cognitive competencies; and bonding, resiliency, self-efficacy, recognition for positive behaviors, positive identity, opportunities for prosocial involvement, prosocial norms, self-determination, and belief in the future. The evaluation found significant increases in positive outcomes. Intervention group members had significantly higher high school graduation rates. Their rates of subsequent college or postsecondary school attendance rates were higher, and they received more honors or awards than did the control-group students.

Characteristics of Effective Positive Youth Development Programs

Summary of the characteristics of these twenty-five effective positive youth development programs is instructive. These programs may not be typical of positive youth development programs in general. These programs were fortunate to have attracted funding to support strong evaluations. Thus, we expect that they are at a later stage of development having convinced funding sources of their evaluability. Evaluability usually entails a strong rationale for the program components and evidence of replicability, for example, manualization of procedures and curricula.

Youth development constructs

All of the effective programs in this review addressed a minimum of five positive youth constructs. Most interventions addressed at least eight constructs, and three-domain programs averaged ten constructs. Three constructs were addressed in all twenty-five well-evaluated programs: competence, self-efficacy, and prosocial norms. Several other constructs were addressed in more than half of the twenty-five programs including opportunities for prosocial involvement (88 percent), recognition for positive behavior (88 percent), and bonding (76 percent);

and 50 percent of the well-evaluated programs addressed positive identity, self-determination, belief in the future, resiliency, and spirituality.

Measurement of positive and problem outcomes

Whether a positive youth development intervention measures, as well as addresses, positive outcomes has important implications for the future of the positive youth development field. The minimum requirement for inclusion was that the evaluation measure either reductions in problem behavior or increases in positive behavior. Measures based on reductions in problem behavior were widely represented in the well-evaluated effective programs, with twenty-four (96 percent) interventions using these to assess intervention outcomes. Nineteen programs (76 percent) used positive outcome measures in addition to measures of problem reduction. This is higher than was expected. There is a need for all positive youth development programs to measure both types of outcomes to assess fully the effects of these programs on youth. This integrated measurement approach will provide us with a greater understanding of program effects on all important youth outcomes.

Structured curriculum

Having a structured curriculum or structured activities is critical for program replication. Twenty-four (96 percent) of the well-evaluated effective programs incorporated a structured curriculum or program of activities. One program, Big Brothers/Big Sisters, did not focus on structured-curriculum, skill-based strategies to build social competence. Big Brothers/Big Sisters assumed that positive outcomes are mediated by the bonding and other aspects of positive interaction (such as the presumed modeling of effective behavior by the adult) within the mentoring relationship.

Program frequency and duration

Twenty (80 percent) effective, well-evaluated programs were delivered over a period of nine months or longer. A number of these, often those operating in a school domain, applied their interventions during the academic year. In the interventions shorter than nine months, programs ranged from ten to twenty-five sessions, averaging about twelve sessions per intervention.

Program implementation and assurance of implementation quality

Fidelity of program implementation is one of the most important topics in the positive youth development field. Implementation fidelity has repeatedly been shown to be related to effectiveness (Battistich et al. 1996; Botvin et al. 1995; Gottfredson, Gottfredson, and Hybl 1993). Among multiyear, well-funded studies, separate evaluations of implementation, in addition to outcome evaluation, are

becoming more common. The effective positive youth development programs reviewed here consistently attended to the quality and consistency of program implementation. Twenty-four (96 percent) evaluations in some way addressed and/or measured how well and how reliably the program implementers delivered the intervention.

Populations served

Roughly three-fourths of the programs indicated that they had served African American and European American Caucasian youth. Half of the programs reviewed included Hispanic youth, and approximately one-third of the programs identified Asian American youth among their participants. Native American youth were involved in about 28 percent of these programs.

Conclusion

We found a wide range of positive youth development approaches that resulted in promoting positive youth behavior outcomes and preventing youth problem behaviors. Nineteen effective programs showed positive changes in youth behavior, including significant improvements in interpersonal skills, quality of peer and adult relationships, self-control, problem solving, cognitive competencies, self-efficacy, commitment to schooling, and academic achievement. Twenty-four effective programs showed significant improvements in problem behaviors, including drug and alcohol use, school misbehavior, aggressive behavior, violence, truancy, high-risk sexual behavior, and smoking. This is good news indeed. Promotion and prevention programs that address positive youth development constructs are definitely making a difference in well-evaluated studies.

Although a broad range of strategies produced these results, the themes common to success involved methods to strengthen social, emotional, behavioral, cognitive, and moral competencies; build self-efficacy; shape messages from family and community about clear standards for youth behavior; increase healthy bonding with adults, peers, and younger children; expand opportunities and recognition for youth; provide structure and consistency in program delivery; and intervene with youth for at least nine months or longer. Although one-third of the effective programs operated in only a single setting, it is important to note that for the other two-thirds, combining the resources of the family, the community, and the school was important to success.

In addition to the good news about positive youth development programs, the review raised some concerns and considerations for the future. A little more than half of the well-evaluated programs measured outcomes only at the end of the program delivery with no follow-up measurement. Whether these programs will continue to show positive results in follow-up periods remains unanswered. This is of particular concern since in two instances, among programs that reported long-term results, programs were unable to sustain their initial positive findings. It is

clearly most desirable when programs can demonstrate positive long-term outcomes.

Evaluators of positive youth development programs are encouraged to take action to expand the knowledge gained from evaluations. Achieving consensus on the use of standardized youth outcome measures would help immensely to understand whether the findings of youth development programs are replicable. While negative behavior outcomes are more standardized, measures of positive youth development tend to be more idiosyncratic to each study or investigator. Furthermore, studies should measure changes of both positive and problem behaviors. Although such positive outcomes as academic achievement, engagement in the workforce, and income are widely accepted positive outcome measures, there is little consensus on what constitutes a complete set of positive youth development outcomes. Measurement of a comprehensive set of predictors of positive and problem outcomes will allow for a better understanding of the processes through which the intervention has an impact on youth outcomes. A complete measurement package (positive and problem behaviors, appropriate and relevant positive youth development constructs, and risk and protective factors) common across promotion and prevention studies would increase our understanding of the processes leading to positive youth development. This will help to establish a shared language and framework.

Finally, greater consensus on design, measurement, and program information that is reported in peer-reviewed articles will enhance the accumulation of knowledge from the evaluation of youth development programs. In program reports, particularly in peer-reviewed journals but also in unpublished evaluation studies, there must be both sufficient narrative description and quantitative and statistical detail to enable an independent assessment of what the program accomplished. Program descriptions should specify which youth constructs they address, and they should specify the relationship between these constructs and the outcomes that the evaluation measures. As a field of youth development specialists, we show surprisingly little agreement on these issues. As long as some studies report such key information as group means and standard deviations and others do not, it will be more difficult to make comparisons between studies.

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