APA PsycARTICLES

American Psychologist June/July 2003 Vol. 58, No. 6/7, 425-432 © 2003 by the American Psychological Association DOI: 10.1037/0003-066X.58.6-7.425 For personal use only--not for distribution.

## Prevention That Works for Children and Youth An Introduction

**Roger P. Weissberg** 

Collaborative for Academic, Social, and Emotional Learning Department of Psychology, University of Illinois at Chicago

Karol L. Kumpfer

Department of Health Promotion and Education, University of Utah Martin E. P. Seligman Department of Psychology, University of Pennsylvania

#### ABSTRACT

The widespread implementation of effective prevention programs for children and youth is a sound investment in society's future. The most beneficial preventive interventions for young people involve coordinated, systemic efforts to enhance their social-emotional competence and health. The articles in this special issue propose standards for empirically supported programming worthy of dissemination and steps to integrate prevention science with practice. They highlight key research findings and common principles for effective programming across family, school, community, health care, and policy interventions and discuss their implications for practice. Recent advances in prevention research and growing support for evidence-based practice are encouraging developments that will increase the number of children and youth who succeed and contribute in school and life.

Although researchers and practitioners have been drawn to the promise of primary prevention for several decades, tangible research-based progress has been achieved only recently. In 1976, the National Institute of Mental Health convened leading researchers and practitioners who proclaimed that primary prevention was an idea whose time had come (Klein & Goldston, 1977). But, in reality, the scientific base for effective practice at that time was meager. Similarly, the <u>Task Panel on Prevention (1978)</u> of the President's Commission on Mental Health declared that the nation was on the threshold of "the most exciting mental health revolution" (p. 1825) in which primary prevention efforts would lower the incidence of emotional disorder by reducing stress and enhancing competence and coping skills. Even this optimistic report noted, however, that efforts to prevent

mental illness and enhance development in young people were unstructured and receiving insufficient attention at the federal, state, and local levels.

During the 1980s, the American Psychological Association's (APA) Task Force on Prevention, Promotion and Intervention Alternatives in Psychology launched a major search for research-based prevention programs (Price, Cowen, Lorion, & Ramos-McKay, 1988). The task force contacted 900 experts in prevention and received nearly 300 responses describing prevention efforts. However, when the task force examined the evidence of effectiveness for these programs, only 14 could be characterized as model programs. Fortunately, there has been considerable progress since the first APA Task Force published *14 Ounces of Prevention* (Price et al., 1988). Fifteen years later, there are several pounds worth of quality prevention programs that work.

The articles in this special issue are an outgrowth of Martin E. P. Seligman's APA Presidential Task Force on Prevention: Promoting Strength, Resilience, and Health in Young People (see the Author's note for a list of task force members). The task force members concluded that prevention research had matured sufficiently to synthesize new knowledge and offer key findings to guide prevention practice and policy. Since the first task force report, the Institute of Medicine (IOM) Committee on the Prevention of Mental Disorders' major review (Mrazek & Haggerty, 1994) established rigorous standards for prevention research, highlighted the scientific credibility the field has achieved, and prompted constructive debate regarding priorities for future research, practice, and training (Albee, 1996; Heller, 1996; Weissberg, 2000). In addition, several recent books, meta-analyses, and literature reviews have identified the growing number of empirically supported prevention and youth development programs (e.g., Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Cicchetti, Rappaport, Sandler, & Weissberg, 2000; Durlak, 1997; Durlak & Wells, 1997; Greenberg, Domitrovich, & Bumbarger, 2001; Gullotta & Bloom, 2003; Sloboda & Bukoski, 2002; Tobler et al., 2000; Weissberg & Greenberg, 1998; Weissberg, Gullotta, Hampton, Ryan, & Adams, 1997). In other words, substantial research progress has been made, the field has evolved, and the present is a good time to share current perspectives on best practices and highlight future challenges and directions.

## **Rationale Regarding the Need for Prevention Programs That Work**

The conditions in which children are raised changed significantly during the 20th century (Weissberg, Walberg, O'Brien, & Kuster, 2003). Divorce occurs more frequently. It is more common for unmarried women to bear and rear children. Dual-career couples and employment of mothers outside the home have become the norm. The traditional family type with two biological parents, one working in the home and the other working in the formal labor market, now accounts for less than one third of all U.S. families. Although structural changes in families are not as important for successful child development as are parental closeness, communication, and discipline, these factors contribute to increased adult stress and parental absence. They reduce time for quality adult-child interactions and make it more challenging for families to combat harmful

peer, media, and community influences. The overall impact of these changes on young people has been negative and widespread.

As we enter the 21st century, substantial percentages of young people experience mental health problems, engage in risky behaviors, and lack social-emotional competencies. The Surgeon General's report on mental health indicated that 20% of children and adolescents experience the symptoms of a mental disorder during the course of a year and that 75%–80% of these children fail to receive appropriate services (U.S. Department of Health and Human Services, 1999). Dryfoos (1997) estimated that 30% of 14–17-year-olds engage in multiple high-risk behaviors and that another 35% considered to be at medium risk—are involved with one or two problem behaviors. Approximately 35% have little or no involvement with problem behaviors, but they require strong and consistent support to avoid becoming involved. Benson, Scales, Leffert, and Roehlkepartain (1999) indicated that relatively low percentages of young people have personal competencies, values, attitudes, and environmental supports that protect against high-risk behavior and encourage the growth of positive behaviors.

In her assessment regarding the functioning of young people and families, <u>Dryfoos</u> (1994) highlighted three conclusions that remain true a decade later. First, a significant proportion of children will fail to grow into contributing, successful adults unless there are major changes in the ways they are taught and nurtured. Second, although families and schools have traditionally carried out the responsibilities for raising and educating children, they require transformation to fulfill these obligations more effectively. Finally, new kinds of community resources and arrangements are needed to support the development of young people into responsible, healthy, productive workers and citizens.

# **Prevention Frameworks and Controversies**

Prevention has become a multidisciplinary science that draws on basic and applied research from many disciplines including psychology, public health, education, psychiatry, social work, medicine, nursing, sociology, criminal justice, political science, law, communications, and economics. Its interdisciplinary origins have given strength and credibility to the field but have also complicated attempts to achieve consensus on a definition for prevention. Given that different disciplinary approaches use varying theoretical perspectives and strategies to prevent a broad spectrum of negative outcomes—including physical illness, mental disorders, violence, school failure, health-damaging risk behaviors, and poverty—there is considerable debate about the most appropriate terminology to use and the kinds of interventions to consider.

Historically, the most common terminology used in the fields of public health and preventive mental health included the terms *primary*, *secondary*, and *tertiary*, based on the behavioral or health status of the group targeted for intervention (Caplan, 1964). Primary prevention included actions to decrease the number of new cases or incidence of a disorder, secondary prevention involved early identification and efficient treatment to lower the prevalence of established cases, and tertiary prevention emphasized rehabilitation to reduce the severity of disability associated with an existing disorder.

Thirty years later a different theoretical framework was contained in the IOM report. Its authors explained prevention as part of an intervention spectrum for mental disorders that also included treatment and maintenance. In this view, the term prevention was reserved for programming that occurs before the onset of a diagnosable disorder (Mrazek & Haggerty, 1994). They divided preventive interventions into three subcategories: (a) *universal preventive interventions* that target the general public or a whole population group that has not been identified on the basis of individual risk; (b) *selective preventive interventions* that focus on individuals or population subgroups who have biological, psychological, or social risk factors, placing them at higher than average likelihood of developing a mental disorder; and (c) *indicated preventive interventions* that target high-risk individuals with detectable symptoms or biological markers predictive of mental disorder but do not meet diagnostic criteria for disorder at the present time (Munoz, Mrazek, & Haggerty, 1996).

Li is beyond the purview of this article to discuss in detail the pros and cons of these two classification systems and the overlap and differences between them (for a discussion of these issues, see <u>Weissberg & Greenberg, 1998</u>). However, one core difference merits discussion and demands that informed participants take a stance—that is, the debate regarding the extent to which youth development, health promotion, competence enhancement, and positive psychology are integral to prevention. Typically, primary prevention encompasses disease/disorder prevention, health maintenance, and health promotion and enhancement. For example, <u>Bloom and Gullotta (2003</u>, p. 13) defined primary prevention as "[involving] actions that help participants (or facilitate participants helping themselves): (1) to prevent predictable and interrelated problems, (2) to protect existing states of health and healthy functioning, and (3) to promote psychosocial wellness for identified populations of people."

In contrast, the IOM report recommended distinguishing prevention from promotion efforts, offering the following justification for exclusion:

The reason for not including it within the above spectrum is that health promotion is not driven by an emphasis on illness, but rather by a focus on the enhancement of well-being. It is provided to individuals, groups, or large populations to enhance competence, self-esteem, and a sense of well-being rather than to intervene to prevent psychological or social problems or mental disorders. This focus on health, rather than on illness, is what distinguished health promotion activities from the enhancement of protective factors within a risk reduction model for preventive interventions. (Mrazek & Haggerty, 1994, p. 27)

Several prevention theorists, who argue for a synthesis of prevention and promotion approaches, criticize the IOM perspective as too narrow, especially for children and youth (e.g., <u>Albee, 1996; Cowen, 2000; Durlak & Wells, 1997; Weissberg & Greenberg, 1998</u>). They recommend using broader health-promotion and competence-enhancement frameworks that integrate strategies for reducing risk factors and enhancing protective factors through coordinated programming. They point out that preventing problem

behaviors is a worthy endeavor but is a much more limited goal (<u>Masten & Coatsworth, 1998</u>; <u>Perry, 1999</u>). It is undisputable that young people who are not drug abusers, who are not depressed or suicidal, who are not antisocial or in jail, and who are not school dropouts may still lack the resources to become healthy adults, caring family members, responsible neighbors, productive workers, and contributing citizens (<u>Pittman, Irby, Tolman, Yohalem, & Ferber, 2001</u>). Problem-prevention efforts for young people are most beneficial when they are coordinated with explicit attempts to enhance their competence, connections to others, and contributions to their community. These positive outcomes serve a dual function: as protective factors that decrease problem behaviors and as foundations that support healthy development and success in life (<u>Cicchetti et al., 2000</u>; <u>Durlak & Wells, 1997</u>; <u>Elias et al., 1997</u>).

The Task Force on Prevention: Promoting Strength, Resilience, and Health in Young People endorses this broader perspective. In the articles in this special issue, the task force defined primary prevention for young people as involving the dual goals of reducing the incidence of psychological and physical health problems and of enhancing social competence and health (Cowen, 1983; Weissberg & Greenberg, 1998). These programs target systems and policies focusing on general populations through families, schools, communities, health services, and legislation (Black & Krishnakumar, 1998; Bronfenbrenner & Morris, 1998). They are directed to essentially well people rather than to those with behavioral problems (i.e., universal preventive intervention) or to those whose life circumstances or recent experiences increase their epidemiological risk for negative psychosocial outcomes (i.e., selective preventive interventions).

Given the current status of children and families in the United States, the nation must enhance the quality of the environments in which young people are raised and educated. Children will benefit most when families, schools, community organizations, health care and human-service systems, and policymakers work together to strengthen each other's efforts rather than working independently to implement programs that attempt to compensate for perceived deficits in social settings. Well-coordinated and research-based strategies that prevent problems and enhance the social-emotional health of all children are a sound investment in the future of the United States. Preventing problems and promoting positive outcomes in the context of coordinated primary prevention programming require integrating the theoretical frameworks and intervention strategies of prevention science (Coie et al., 1993; Mrazek & Haggerty, 1994; Reiss & Price, 1996) with those of positive psychology (Seligman & Csikszentmihalyi, 2000), applied developmental science (Hetherington, 1998; Lerner, Fisher, & Weinberg, 2000), competence enhancement (Masten & Coatsworth, 1998; Weissberg & Greenberg, 1998), health promotion (Marx & Wooley, 1998; Perry, 1999), positive youth development (Catalano et al., 2002; Larson, 2000; Pittman et al., 2001), resilience (Glantz & Johnson, 1999), and wellness (Cowen, 2000).

## Overview of the Articles in the Special Issue on Prevention That Works for Children and Youth: Accomplishments, Challenges, and Recommendations

The articles in this special issue build on the efforts of Price et al. (1988) and offer a more positive appraisal of the field's accomplishments. The articles were contributed by nationally recognized experts and address the current status of evidence-based prevention programming from diverse vantage points. The opening article offers a road map of strategic tasks for integrating science with prevention practice (Biglan, Mrazek, Carnine, & Flay, 2003). The next article identifies principles of best prevention practices through a review across four categorical problem areas: substance abuse, risky sexual behavior, school failure, and juvenile delinquency and violence (Nation et al., 2003). In the final five articles, specialists in the domains of families (Kumpfer & Alvarado, 2003), schools (Greenberg et al., 2003), communities (Wandersman & Florin, 2003), health care settings (Johnson & Millstein, 2003), and public policy (Ripple & Zigler, 2003) review prevention findings and discuss their implications for practice. Taken together, these articles highlight results from the growing body of evidence-based prevention programming across multiple service-delivery domains and problem areas, identify research contributions and limitations, and offer recommendations for improving future research, policy, and practice.

**Biglan et al.** (2003) propose a set of action steps to foster the widespread implementation of evidence-based prevention practices to increase the numbers of young people who lead successful and healthy lives. Research-based program development uses epidemiological data to guide the targeting and design of preventive interventions. Building from a strong theoretical and empirical base, communities can implement monitoring systems that assess key risk and protective factors, problem behaviors, and positive outcomes. These monitoring systems will make it feasible for communities, states, and the federal government to evaluate the impact of their prevention and youth development efforts.

**Biglan et al.** (2003) also propose rigorous standards for determining which preventive interventions have a sufficiently strong evidence base to warrant broad dissemination. Several government and private organizations have convened working groups to identify empirically supported interventions to prevent drug use, violence, and HIV/AIDS. Lists of effective prevention programs put forth by federal agencies include the following: the Center for Substance Abuse Prevention (www.samhsa.gov/centers/csap/modelprograms), the Centers for Disease Control and Prevention

(www.cdc.gov/hiv/projects/rep/compend.htm), the National Institute on Drug Abuse (www.nida.nih.gov/prevention/prevopen.html), the Office of Juvenile Justice and Delinquency Prevention (www.colorado.edu/cspv/blueprints/index.html and www.strengtheningfamilies.org), the U.S. Department of Education Office of Safe and Drug-Free Schools (www.ed.gov/offices/OSDFS/exemplary01/2\_intro2.html), and the Surgeon General's Office (www.surgeongeneral.gov/library/youthviolence/report.html).

A part of establishing rigorous standards for endorsing effective practice involves acknowledging the fact that individuals inevitably occupy multiple roles. A person can serve as program designer and evaluator, as member of a panel that rates programs that are similar or compete with the panel's own, as a decision maker about which programs merit support and dissemination, or, as is the case of some articles in this special issue, as

an author describing and endorsing some programs while excluding others. Conflicts of interest are to some extent an expected part of nearly all scholarly domains. However, when the products of scholarly endeavors are held up as models or selected for particular notice or funding, the complexity of group and individual interests multiplies. Transparency of relationships and interests, the use of experts who are independent and impartial in the context of the task at hand, the standard practice of using a plurality in making decisions about which programs to support, and independent replication of research results are helpful navigational tools. In the articles in this special issue, readers will find disclosures that are intended to illuminate the interests of the authors when they may be seen as connected to the opinions or conclusions contained in the text.

Although the impartial identification of evidence-based programs is a positive step forward, schools and communities that aspire to implement quality programming face high hurdles. Wandersman and Florin (2003) point out that successful community-based prevention programming involves effectively navigating a wide constellation of interconnected pieces. The five essential steps are assessing community needs and resources, selecting appropriate evidence-based interventions for specific target groups to produce desired outcomes, coordinating newly adopted programming with other initiatives already under way, establishing resources and supports for quality implementation, and conducting ongoing process and outcome evaluations to foster appropriate program adaptation and improvement. Wandersman and Florin report that community prevention efforts have produced a mixed record of success. They suggest that prevention science is not sufficiently well developed to provide research-based guidance regarding issues of community needs assessment and program coordination, implementation, adaptation, and sustainability. Their opinions are endorsed by Biglan et al. (2003), who call for more research to evaluate methods that support the effective selection and implementation of empirically based practices. They also describe the need for an infrastructure of organizations to assist schools, organizations, health care settings, communities, and states in implementing and evaluating researched-based youth development programming.

Several authors in this special issue offer convergent perspectives regarding the conceptualization, design, implementation, and evaluation of comprehensive prevention and youth development initiatives. Nation et al. (2003) conducted a systematic analysis of diverse problem-prevention literature reviews and garnered core principles for prevention programming. Their findings are complemented by conclusions shared in reviews of family, school, community, health care, and public policy preventive interventions (Greenberg et al., 2003; Johnson & Millstein, 2003; Kumpfer & Alvarado, 2003; Ripple & Zigler, 2003; Wandersman & Florin, 2003). Although domain-specific practices may be more relevant for a targeted outcome or single delivery system, Nation et al. and other contributors point out that coordinated prevention programming that works has the following six characteristics.

1. Set Uses a research-based risk and protective factor framework that involves families, peers, schools, and communities as partners to target multiple outcomes. Effective preventive interventions are based on sound theories of child and

organizational development and incorporate scientific approaches that demonstrate beneficial effects on children's attitudes and behavior and the systems that serve them (Bronfenbrenner & Morris, 1998; Reiss & Price, 1996). Given the interrelationships among problem behaviors and their developmental trajectories, comprehensive prevention and health promotion programs are designed to address common personal, family, school, and community risk and protective factors for diverse outcomes rather than being structured primarily to reduce problem behaviors in a single area (Jessor, 1993). It is both feasible and cost-effective to target multiple outcomes in the context of a coordinated set of youth development and health promotion programs (Flay, 2002). No single program component can prevent multiple high-risk behaviors. Rather, a set of coordinated, collaborative strategies and programs is required in each community (Dryfoos, 1997). Family-focused prevention efforts have a

each community (Dryfoos, 1997). Family-focused prevention efforts have a greater impact than strategies that focus only on parents or on children (Kumpfer & Alvarado, 2003). Similarly, combined school and family programs deliver more benefits than those managed in isolation from each other (Greenberg et al., 2003; Kumpfer, Alvarado, Tait, & Turner, 2002). Also, community programs that include policy changes and media campaigns are more effective when they are coordinated with family, peer, and school components (Wandersman & Florin, 2003).

- 2. Is long term, age specific, and culturally appropriate. Youth development is a continuous process, and experiences at any given age are influenced by and build on prior experiences. In addition, the physical and psychological resources and supports required for optimal development vary according to the needs of each age and cultural group. Programs are most effective when they are tailored to the cultural, community, and developmental norms of program participants and include target groups and service providers in program planning, implementation, and evaluation (Schinke & Matthieu, 2003). Prevention programming is most effective if it is continuous and comprises a series of socioculturally appropriate and coordinated programs for each particular stage of development: prenatal, infancy, toddlerhood, preschool years, elementary school years, middle childhood, and adolescence. Prevention efforts must begin earlier and be more intensive when targeting populations with higher levels of risk (Zigler & Berman, 1983).
- 3. Fosters development of individuals who are healthy and fully engaged through teaching them to apply social-emotional skills and ethical values in daily life. Effective programming that enhances children's social, emotional, and ethical behavior uses diverse, interactive skills training methods (e.g., role plays, modeling, applied practice) and creates opportunities for effective use of the newly learned skills in daily life (Bandura, 1995; Hawkins & Weis, 1985; Ladd & Mize, 1983). Young people learn to recognize and manage their emotions, appreciate the perspectives of others, establish positive goals, make good decisions, and handle interpersonal situations and conflicts. They also develop responsible and respectful attitudes and values about self, others, work, health, and community service (Collaborative for Academic, Social, and Emotional Learning, 2003; Elias et al., 1997). In many effective programs young people are

encouraged to take active roles in organizations and communities and to identify and implement their own solutions. Such collaborative processes foster greater participation and connection to prosocial peers, adults, and institutions and decrease the likelihood of risky behavior (<u>Benson et al., 1999</u>; <u>Pittman et al.,</u> <u>2001</u>).

- 4. Aims to establish policies, institutional practices, and environmental supports that nurture optimal development. Safe and stable environments, basic care and services, and high-quality training programs provide a foundation for healthy behavior. To develop optimally, young people also need social supports and positive relationships with prosocial peers and adults who provide nurturing, clear standards, high expectations, guidance, and encouragement (Catalano et al., 2002; McNeeley, Nonnemaker, & Blum, 2002; Resnick et al., 1997). They also benefit from opportunities to take on new roles and responsibilities, master challenges, and contribute to their family and community. Although some well-designed, child-focused programs may yield short-term positive effects, it is important to remember that young people grow up in families, schools, and neighborhoods, not in programs. Therefore, effective programs often seek to introduce policies and to structure communities, organizations, and settings that systematically and regularly provide services, supports, and opportunities for families and children as an integral part of standard practice (Pittman et al., 2001; Ripple & Zigler, 2003).
- 5. Selects, trains, and supports interpersonally skilled staff to implement programming effectively. Well-planned staff development provides basic theoretical knowledge, clear program goals and objectives, modeling and practice of effective intervention strategies, regular coaching, and constructive feedback from colleagues (Hall & Hord, 2001). Prevention programming must be effectively implemented to produce optimal child outcomes. In addition, program impact is mediated by a program provider's personal efficacy, mastery in conveying program content, warmth, empathy, humor, relationship skills, and capacity to guide and foster the skill development and application of young people (Kumpfer & Alvarado, 2003). Thus, recruiting and training skilled, high-quality staff are essential to beneficial programming.
- 6. Incorporates and adapts evidence-based programming to meet local community needs through strategic planning, ongoing evaluation, and continuous improvement. Effective prevention practice involves convening key players who assess community needs and plan strategically to establish priority goals and feasible action steps to achieve them. A comprehensive needs assessment uses multiple methods to identify community problems, strengths, current activities, and concerns from diverse perspectives. A core implementation challenge involves selecting and coordinating empirically supported programming with current community strengths, resources, and initiatives. It is critical to gather ongoing process and outcome data to assess implementation quality, measure program impact, analyze cost-effectiveness and cost-benefits, document accountability for stakeholders, and shape program improvement (Tebes, Kaufman, & Connell, 2003; Wandersman & Florin, 2003).

## **Conclusions and Future Directions**

Despite the growing achievements in prevention theory, research, and practice, considerable progress is still needed if significant numbers of children are to experience tangible benefits in their lives. One of the field's highest priorities and payoffs will come from systematically evaluating multiyear, multicomponent programs that target multiple social and health outcomes. Our understanding of mediating and moderating variables that influence program effects—especially in larger systems like schools and communities—is limited. Research studies should pay greater attention to process measures of program quality and fidelity, rather than focusing primarily on the more typical strategy of outcome evaluations. Researchers and practitioners alike need to know the implementation conditions and variations that maximize program impacts. A broader range of outcome measures should be collected to assess educational, health, and environmental change. Standardized measures agreed on for different common outcomes are needed to allow comparison of data across research projects.

A major issue in the prevention field is the degree to which programs should target specific at-risk groups using *selective* or *indicated prevention approaches* or spread across all groups with no differentiation using *universal prevention approaches*. Universal prevention programs are generally not of sufficient dosage or targeted enough to have a discernible impact on higher risk children. A number of recently published comprehensive prevention programs combining universal, selective, and indicated approaches in multicomponent, multiyear projects are showing highly positive effects (Catalano et al., 2002; Greenberg et al., 2001). These comprehensive programs often involve community, school, and family components that support young people's application of social and life skills across varied settings.

Although a number of effective individual prevention programs have been identified, additional research is needed on how to disseminate and promote their adoption and effective implementation (Backer, 2000; Kumpfer & Kafterian, 2000). Collaborations of researchers with practitioners are critical to elucidate how this "diffusion of innovations" can best be achieved. We need to understand more about both the allure and the actual impact of programs that are popular with practitioners but currently lack documented research support through efficacy and effectiveness trials. Criteria for determining acceptable "evidence-based practices," both in terms of the variables examined and levels of evidence achieved, should be more standardized across the prevention field (Biglan et al., 2003). In addition, we should not forget that programs based on principles of effective prevention are not necessarily effective. They still need to be tested through systematic research and ongoing evaluation. Too many practitioners are using such lists of principles to say their own homegrown—but untested—programs are effective, based on underlying principles alone.

The federal or state government's role in child welfare and family policies is relatively weak in the United States compared with other countries (<u>Ripple & Zigler, 2003</u>). Despite sufficient research demonstrating the effectiveness of school, family, and community prevention approaches for adolescent health and social problems, many policymakers remain unconvinced about the benefits of prevention practice. Prevention that works requires coordinated approaches and multiyear commitments. Accordingly,

prevention researchers and practitioners should provide data to and align with political leaders who are committed to long-term results rather than short-term solutions. The funding base for the prevention field is suffering, as is the physical and mental health of children in the United States. With budget crises in most states, cuts are being made in health, drug treatment and prevention, delinquency prevention, and mental health services because states cannot support the required federal matches.

Despite the high rates of adolescent mental health, delinquency, and drug abuse problems, prevention is still not a sufficiently high priority for state or federal policymakers and funders. Federal and state policymakers can create prevention agendas and priorities that influence prevention approaches nationwide through shaping the most effective use of prevention funds (Ripple & Zigler, 2003). Fortunately, policymakers have decided that accountability is a high priority for such programs and are mandating that the limited funds at least be used for evidence-based practices. Federal, state, and local prevention agencies responsible for coordinating prevention research and funding of prevention programs to promote positive child and youth development would greatly advance the field. Rather than categorical funding to promote research on one part of the child development puzzle, a more productive strategy would bring prevention researchers and practitioners together to examine interventions that affect multiple outcomes across multiple delivery sites (e.g., youth and family services agencies, schools, faith-based organizations, courts, health care organizations, and community coalitions).

Researchers and practitioners should become more active in public policy advocacy that would support increased funding for prevention research, practice, and training at the federal, state, and local levels. The field must coalesce into a recognized profession and discipline. A cadre of young prevention researchers and practitioners must be attracted to the field and be trained by the "graying" corps of experts. Effective multidisciplinary prevention training programs should be firmly established in institutions of higher education (Weissberg, 2000).

In summary, the articles in this special issue on Prevention That Works for Children and Youth document that substantial gains have been made in prevention research, practice, and policy since the report of the first APA task force (Price et al., 1988). Major advances have been achieved in the domains of family (Kumpfer & Alvarado, 2003), school (Greenberg et al., 2003), and community programming (Wandersman & Florin, 2003). Johnson and Millstein (2003) highlight a few successful research-based exemplars in health care settings but note that the empirical literature is relatively sparse. Still, they make a strong case for the widespread impact that behaviorally based prevention programs can have, and they identify multiple opportunities for psychologists' participation across a wide variety of health care settings. Ripple and Zigler (2003) provide promising data regarding the benefits of prevention policy for children and suggest ways to overcome the unfortunate gap in the knowledge base because public policy has the most potential of any tool to enhance the health and development of millions of children. Overall, the picture of accomplishment in prevention research and practice for young people is brightening. The most important advances regarding the effective implementation of empirically supported prevention programming will occur

during the next decade (<u>Weissberg et al., 1997</u>). Given the advances of scientists and practitioners documented in this special issue, we look forward to an era in which national data trends indicate that children and youth in the United States are healthier and more successful in school and life.

#### REFERENCES

Albee, G. W. (1996). Revolutions and counterrevolutions in prevention. *American Psychologist*, *51*, 1130-1133. PsycINFO Article

Backer, T. E. (2000). The failure of success: Challenges of disseminating effective substance abuse prevention programs. *Journal of Community Psychology*, 28, 363-373.

Bandura, A. (1995). *Self-efficacy in changing societies*. (New York: Cambridge University Press.)

Benson, P. L., Scales, P. C., Leffert, N.,& Roehlkepartain, E. C. (1999). *A fragile foundation: The state of developmental assets among American youth.* (Minneapolis, MN: Search Institute.)

Biglan, A., Mrazek, P. J., Carnine, D., & Flay, B. R. (2003). The integration of research and practice in the prevention of youth problem behaviors. *American Psychologist*, *58*, 433-440.

Black, M. M., & Krishnakumar, A. (1998). Children in low-income, urban settings: Interventions to promote mental health and well-being. *American Psychologist*, 53, 635-646. PsycINFO Article

Bloom, M.,& Gullotta, T. P. (2003). Evolving definitions of primary prevention. (In T. P. Gullotta & M. Bloom (Eds.), *Encyclopedia of primary prevention and health promotion* (pp. 9–15). New York: Kluwer Academic/Plenum.)

Bronfenbrenner, U.,& Morris, P. A. (1998). The ecology of developmental processes. (In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5th ed., pp. 993–1028). New York: Wiley.)

Caplan, G. (1964). *Principles of preventive psychiatry*. (New York: Basic Books.) Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention & Treatment* 5

evaluations of positive youth development programs. *Prevention & Treatment, 5,* . (Article 15. Retrieved from

http://journals.apa.org/prevention/volume5/pre0050015a.html)

Cicchetti, D., Rappaport, J., Sandler, I. N., & Weissberg, R. P. (2000). *The promotion of wellness in children and adolescents*. (Washington, DC: Child Welfare League of America Press.)

Coie, J. D., Watt, N. F., West, S. G., Hawkins, J. D., Asarnow, J. R., & Markman, J. H. (1993). The science of prevention: A conceptual framework and some directions for a

national research program. American Psychologist, 48, 1013-1022. PsycINFD

Collaborative for Academic, Social, and Emotional Learning. (2003). Safe and sound: An educational leader's guide to evidence-based social and emotional learning (SEL) *programs.* (Chicago: Author. Retrieved February 1, 2003, from http://www.casel.org) Cowen, E. L. (1983). Primary prevention in mental health: Past, present, and future. (In R. D. Felner, L. A. Jason, J. N. Moritsugu, & S. S. Farber (Eds.), *Preventive psychology: Theory, research and practice* (pp. 11–25). New York: Pergamon Press.)

Cowen, E. L. (2000). Psychological wellness: Some hopes for the future. (In D. Cicchetti, J. Rappaport, I. N. Sandler, & R. P. Weissberg (Eds.), *The promotion of wellness in children and adolescents* (pp. 477–503). Washington, DC: Child Welfare League of America Press.)

Dryfoos, J. G. (1994). *Full-service schools: A revolution in health and social services for children, youth, and families.* (San Francisco: Jossey-Bass.)

Dryfoos, J. G. (1997). The prevalence of problem behaviors: Implications for programs. (In R. P. Weissberg, T. P. Gullotta, R. L. Hampton, B. A. Ryan, & G. R. Adams (Eds.), *Healthy children 2010: Enhancing children's wellness* (pp. 17–46). Thousand Oaks, CA: Sage.)

Durlak, J. A. (1997). *Successful prevention programs for children and adolescents*. (New York: Plenum Press.)

Durlak, J. A., & Wells, A. M. (1997). Primary prevention mental health programs for children and adolescents: A meta-analytic review. *American Journal of Community Psychology*, 25, 115-152.

Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., & Haynes, N. M. (1997). *Promoting social and emotional learning: Guidelines for educators*. (Alexandria, VA: Association for Supervision and Curriculum Development.)

Flay, B. R. (2002). Positive youth development requires comprehensive health

promotion programs. *American Journal of Health Behavior*, 26, 407-424. Glantz, M. D.,& Johnson, J. L. (1999). *Resilience and development: Positive life adaptations*. (New York: Kluwer Academic/Plenum.)

Greenberg, M. T., Domitrovich, C.,& Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: Current state of the field. *Prevention & Treatment*, 4, . (Article 1. Retrieved from

http://journals.apa.org/prevention/volume4/pre0040001a.html)

Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J.

E., Fredericks, L., Resnik, H.,& Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, *58*, 466-474.

Gullotta, T. P.,& Bloom, M. (2003). *Encyclopedia of primary prevention and health promotion*. (New York: Kluwer Academic/Plenum.)

Hall, G. E., & Hord, S. M. (2001). *Implementing change: Patterns, principles, and potholes.* (Boston: Allyn & Bacon.)

Hawkins, J. D., & Weis, J. G. (1985). The social development model: An integrated approach to delinquency prevention. *Journal of Primary Prevention*, *6*, 73-97. PsycINFD

Heller, K. (1996). Coming of age of prevention science: Comments on the 1994 National Institute of Mental Health-Institute of Medicine Prevention Reports. *American* 

Psychologist, 51, 1123-1127. PsycINFO Article

Hetherington, M. (1998). Applications of developmental science American Psychologist, 53, . ([Special issue].)

Jessor, R. (1993). Successful adolescent development among youth in high-risk settings. *American Psychologist, 48*, 117-126. PsycINFO Article

Johnson, S. B., & Millstein, S. G. (2003). Prevention opportunities in health care settings. *American Psychologist*, *58*, 475-481.

Klein, D. C.,& Goldston, S. E. (1977). *Primary prevention: An idea whose time has come* ((DHEW Publication No. ADM 77-447). Washington, DC: U.S. Government Printing Office.)

Kumpfer, K. L., & Alvarado, R. (2003). Family-strengthening approaches for the prevention of youth problem behaviors. *American Psychologist*, *58*, 457-465.

Kumpfer, K. L., Alvarado, R., Tait, C., & Turner, C. (2002). Effectiveness of schoolbased family and children's skills training for substance abuse prevention among 6–8year old rural children. *Psychology of Addictive Behaviors, 16,* 565-571.

Kumpfer, K. L., & Kaftarian, S. J. (2000). Bridging the gap between family-focused research and substance abuse prevention practice: Preface. *Journal of Primary Prevention*, *21*, 169-183.

Ladd, G. W., & Mize, J. (1983). A cognitive-social learning model of social skill training. *Psychological Review*, 90, 127-157. PsycINFO Article

Larson, R. W. (2000). Toward a positive psychology of youth development. *American Psychologist*, 55, 170-183. PsycINFO Article

Lerner, R. M., Fisher, C. B., & Weinberg, R. A. (2000). Toward a science for and of the people: Promoting civil society through the application of developmental science. *Child Development*, *71*, 11-20.

Marx, E., Wooley, S. F., & Northrop, D. (1998). *Health is academic: A guide to coordinated health programs.* (New York: Teachers College Press.)

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53,* 205-220. PsycINFO Article

McNeeley, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72, 138-146.

Mrazek, P. J., & Haggerty, R. J. (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research.* (Washington, DC: National Academy Press.) Munoz, R. F., Mrazek, P. J., & Haggerty, R. J. (1996). Institute of Medicine Report on Prevention of Mental Disorders: Summary and commentary. *American Psychologist, 51,* 1116-1122. PsycINFO Article

Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., Morrissey-Kane, E.,& Davino, K. (2003). What works in prevention: Principles of effective prevention programs. *American Psychologist, 58*, 449-456.

Perry, C. L. (1999). *Creating health behavior change: How to develop community-wide programs for youth.* (Thousand Oaks, CA: Sage.)

Pittman, K. J., Irby, M., Tolman, J., Yohalem, N.,& Ferber, T. (2001). *Preventing* problems, promoting development, encouraging engagement: Competing priorities or inseparable goals? (Retrieved from

http://www.forumforyouthinvestment.org/preventproblems.pdf) Price, R. H., Cowen, E. L., Lorion, R. P.,& Ramos-McKay, J. (1988). *14 ounces of*  *prevention: A casebook for practitioners.* (Washington, DC: American Psychological Association.)

Reiss, D.,& Price, R. H. (1996). National research agenda for prevention research: The National Institute of Mental Health report. *American Psychologist*, *51*, 1109-1115.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., & Jones, J. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health *Journal of the American Medical Association*, 278, 823-

832. PsycINFO Article

Ripple, C. H., & Zigler, E. (2003). Research, policy, and the federal role in prevention initiatives for children. *American Psychologist*, *58*, 482-490.

Schinke, S. P.,& Matthieu, M. (2003). Primary prevention with diverse populations. (In T. P. Gullotta & M. Bloom (Eds.), *Primary prevention and health promotion* (pp. 92–97). New York: Kluwer Academic/Plenum.)

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Special issue on happiness, excellence, and optimal human functioning. *American Psychologist, 55,*.

Sloboda, Z.,& Bukoski, W. J. (2002). *Handbook of drug abuse prevention: Theory, science, and practice.* (New York: Kluwer Academic/Plenum.)

Task Panel on Prevention. (1978). *Task panel reports submitted to the President's Commission on Mental Health* ((Vol. 4, pp. 1822–1863). Washington, DC: U.S. Government Printing Office.)

Tebes, J. K., Kaufman, J. S., & Connell, C. M. (2003). The evaluation of prevention and health promotion programs. (In T. P. Gullotta & M. Bloom (Eds.), *Primary prevention and health promotion* (pp. 42–61). New York: Kluwer Academic/Plenum.)

Tobler, N. S., Roona, M. R., Ochshorn, P., Marshall, D. G., Streke, A. V.,& Stackpole, K. M. (2000). School-based adolescent drug prevention programs: 1998 meta-analysis.

Journal of Primary Prevention, 20, 275-337. PsycINFO Atticle

U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. (Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.)

Wandersman, A., & Florin, P. (2003). Community interventions and effective prevention. *American Psychologist*, *58*, 441-448.

Weissberg, R. P. (2000). Improving the lives of millions of school children. *American Psychologist*, 55, 1360-1373. PsycINFO Article

Weissberg, R. P.,& Greenberg, M. T. (1998). School and community competenceenhancement and prevention programs. (In W. Damon (Series Ed.) & I. E. Sigel & K. A. Renninger (Vol. Eds.), *Handbook of child psychology: Vol. 4. Child psychology in practice* (5th ed., pp. 877–954). New York: Wiley.)

Weissberg, R. P., Gullotta, T. P., Hampton, R. L., Ryan, B. A., & Adams, G. R. (1997). *Healthy children 2010: Enhancing children's wellness*. (Thousand Oaks, CA: Sage.) Weissberg, R. P., Walberg, H. J., O'Brien, M. U., & Kuster, C. B. (2003). *Long-term trends in the well-being of children and youth*. (Washington, DC: Child Welfare League of America Press.)

Zigler, E.,& Berman, W. (1983). Discerning the future of early childhood intervention. *American Psychologist*, 28, 894-906.

This special issue was suggested by the work of American Psychological Association president Martin E. P. Seligman's Presidential Task Force on Prevention, established in 1998. The full name of the task force was Prevention: Promoting Strength, Resilience, and Health in Young People. The task force members comprised John Abbott, Norman B. Anderson, Camilla P. Benbow, Thomas N. Bradbury, Mihaly Csikszentmihalyi, Patrick H. DeLeon, Joseph Durlak, J. Mark Eddy, Mark T. Greenberg, Suzanne Bennett Johnson (co-chair), Karol L. Kumpfer, Susan G. Millstein, Peter R. Muehrer, Lizette Peterson-Homer (deceased), Irwin N. Sandler, Martin E. P. Seligman, Abraham Wandersman, and Roger P. Weissberg (co-chair). The special issue was developed by Roger P. Weissberg and Karol L. Kumpfer.

We would like to honor the memories of Lizette Peterson-Homer and Emory L. Cowen. Their value as colleagues was matched by their extraordinary contributions to prevention and health promotion.

Correspondence may be addressed to Roger P. Weissberg, Department of Psychology, University of Illinois at Chicago, (M/C 285), 1007 West Harrison Street, Chicago, IL 60607-7137.

Electronic mail may be sent to <u>rpw@uic.edu</u>