

# Promoting Children's Mental Health: Reform Through Interdisciplinary and Community Partnerships

Thomas J. Power  
*The Children's Hospital of Philadelphia*  
*University of Pennsylvania*

*Abstract.* Reforms that have been undertaken in the mental health system have significant implications for psychologists working in and with schools. This article introduces the special series in *School Psychology Review* on "Emerging models for promoting children's mental health: Linking systems for prevention and intervention." This article describes existing problems with the mental health system and priorities that have been identified as targets for change. Specific implications for psychologists and public health advocates whose work relates to the schools are discussed. Also, the purposes and structure of the special series are described.

Mental health is essential for healthy development, success in life, and the welfare of the community. Mental health problems often have their roots in childhood, but unfortunately, a high percentage of children do not receive adequate care, which can lead to more serious problems and the need for more expensive services in adolescence and adulthood. In particular, poor children, who are disproportionately represented among racial and ethnic minority groups, are especially susceptible to mental health difficulties and have the greatest challenges accessing appropriate care (U.S. Department of Health and Human Services, 2001).

Improving the mental health service delivery system in the United States has become a national priority. In April 2002, George W. Bush issued an executive order authorizing the establishment of the President's New Freedom Commission on Mental Health to identify priorities for reforming the mental health system (see [www.whitehouse.gov/news/releases/2002/04/20020429-2.html](http://www.whitehouse.gov/news/releases/2002/04/20020429-2.html)). The mission of this committee is to: (a) review the effectiveness of existing mental health services, including the

role of government in service delivery, and specify unmet needs; (b) identify innovative and effective interventions that have the potential to be replicated widely; and (c) formulate policy options for government agencies and providers of mental health services. This commission was established shortly after the U.S. Surgeon General outlined major problems with the existing mental health system in this country and identified priorities for reform (U.S. Department of Health and Human Services, 1999, 2001).

This article introduces the special series in *School Psychology Review* on "Emerging models for promoting children's mental health: Linking systems for prevention and intervention." The article summarizes the existing problems with the mental health system that have prompted the need for reform, and describes priorities that have been identified as targets for change. In addition, implications for psychologists working in and with schools are discussed, and the purpose and structure of the special series are described.

Because this special series is intended for professionals representing the various sub-

---

Correspondence concerning this article should be addressed to Thomas Power, The Children's Hospital of Philadelphia (CSH-116), 3405 Civic Center Blvd., Philadelphia, PA 19104; E-mail: [power@email.chop.edu](mailto:power@email.chop.edu).

Copyright 2003 by the National Association of School Psychologists, ISSN 0279-6015

groups of child-oriented psychology, including school psychology, as well as public health advocates, the scope of the article is broad and inclusive with specific references to school psychology kept to a minimum. Further, although the school is recognized as a major center for promoting children's mental health, this series, and this article in particular, advances the position that the school is one of many community-based institutions that has the capacity to improve access to and quality of mental health care for children. As such, it is essential that psychologists working in and with schools recognize the potential that schools and other community agencies have to address the mental health needs of children and form partnerships to link these organizations.

### **The Need for Reform**

A substantial proportion of children and adolescents in our country have mental health problems. The rate of mental health disorders among children and adolescents that is associated with at least mild levels of functional impairment has been estimated to be about 20%. Anxiety disorders (13%) are the most prevalent set of mental health disorders, but disruptive behavior disorders (10%) and mood disorders (6%) also are quite common (Shaffer et al., 1996). Virtually all of these children could benefit from programs to address their mental health needs, but most require brief, targeted intervention and a minority need intensive and protracted services.

Although the roots of psychopathology often develop early in childhood (see Cicchetti & Toth, 1998; Loeber & Stouthamer-Loeber, 1998), services typically are provided when individuals are older and their problems become quite severe. This reactive approach serves to overwhelm the mental health system with cases that are difficult to treat, time-consuming, and expensive. The reform movement in health care has emphasized the importance of prevention and early intervention (Short & Talley, 1997), but proactive approaches to care generally have not been the norm.

Regrettably, well below 50% of children with mental health disorders actually receive any kind of treatment to address their needs

(U.S. Department of Health and Human Services, 1999). Failure to address children's mental health needs can have profound effects; it can result in poor health outcomes when these children become adolescents and adults, and it can jeopardize the safety of families, communities, and in some cases, society at large.

Children from low socioeconomic backgrounds and those of racial and ethnic minority status are much less likely to receive mental health care than children from middle and high socioeconomic groups and those who are White. Further, children of minority status who have mental health disorders generally have higher levels of functional impairment than children who are White who have similar disorders. These disparities have been attributed in part to the challenges associated with poverty, discrimination, and language barriers (U.S. Department of Health and Human Services, 2001).

Many factors contribute to the low rates of service utilization among children and families coping with mental health problems. Individuals of minority status are much more likely than persons who are White to be uninsured (U.S. Department of Health and Human Services, 2001). The lack of parity of insurance benefits for mental health services compared with physical health care affects most families, but is a particular burden to those of lower socioeconomic status (SES). The stigma associated with having a mental health problem and seeking out services continues to serve as a major barrier to utilization. Children and families may deny the presence of a problem or a need for help because of the shame they associate with having a mental health problem and seeking care (Friesen & Huff, 1996). A lack of trust in mental health professionals, and the formal agencies through which mental health services typically are provided, also may reduce families' willingness to seek services, particularly among families of minority status (Tucker, 2002).

When services are provided, the quality of care often is not sufficient to produce successful outcomes. Services rendered in the community frequently are not consistent with evidence-based practices (Dodge, 2001). Even when providers select practices that have been

empirically supported, they may fail to implement the procedures with sufficient integrity to achieve beneficial effects. Also, interventions may be applied in a manner that is not responsive to the cultural values and needs of children and families, reducing the likelihood that families will initiate and sustain the use of intervention strategies (National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment, 2001). Further, although reforms in the mental health system introduced in the 1980s (e.g., the Child and Adolescent Services System Program [CAASP]; see Day & Roberts, 1991) have emphasized the need to integrate systems of care in the community, services often are rendered in a fragmented manner with a lack of coordination among providers (Stroul et al., 1996).

Despite rapid advancements in pharmacological and psychosocial interventions for psychiatric disorders (see Phelps, Brown, & Power, 2002), the scientific basis for mental health interventions is underdeveloped (Burns, Compton, Egger, Farmer, & Robertson, 2002). Numerous treatments have been found to be efficacious for children with mental health problems, such as stimulants and behavior therapy for attention-deficit/hyperactivity disorder (ADHD; MTA Cooperative Group, 1999) and cognitive-behavior therapy for anxiety disorders (Kendall et al., 1997), but the knowledge base about efficacious treatments still is quite limited (Burns et al., 2002). Further, little is known about which treatments are best for which children coping with specific disorders or a combination of disorders (National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment, 2001).

Research related to the development and validation of intervention strategies also has been limited by its narrow focus. Efficacy research in many cases has been insufficiently grounded in basic research and theory in the areas of child development, developmental psychopathology, and behavior change (Hughes, 2000). An atheoretical approach to efficacy research in many cases has contributed to its failure to have a meaningful effect

on practice over a sustained period. Further, efficacy research is conducted in highly controlled clinical settings that may be unrelated to the contexts in which services are actually delivered, including schools and primary care pediatric practices. Because efficacy research generally fails to account for the challenges and contingencies existing in practice settings, it is not surprising that practitioners often fail to utilize evidence-based interventions or use them in a manner that is not prescribed by efficacy researchers (Dodge, 2001).

### Directions for Reform

Panels of experts composed of leaders from multiple disciplines representing the research and training, practice, and public policy sectors of the field of mental health have identified numerous priorities for reforming the mental health system. Many of these priorities are outlined in *Mental Health: A Report of the Surgeon General* (U.S. Department of Health and Human Services, 1999; see [www.surgeongeneral.gov/library/mentalhealth/home.html](http://www.surgeongeneral.gov/library/mentalhealth/home.html)) and *Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General* (U.S. Department of Health and Human Services, 2001; see [www.surgeongeneral.gov/library/mentalhealth/cre/](http://www.surgeongeneral.gov/library/mentalhealth/cre/)). Recommendations for creating partnerships to promote children's mental health through schools were reported in *Mental Health, Schools and Families Working Together for All Children and Youth: Toward a Shared Vision* (National Association of State Mental Health Program Directors and the Policymaker Partnership for Implementing IDEA at the National Association of State Directors of Special Education, 2002; see [www.ideapolicy.org/home.htm](http://www.ideapolicy.org/home.htm)). Recommendations for developing the science base in the field of mental health and for linking research and practice have been reported in *Blueprint for Change: Research on Child and Adolescent Mental Health* (National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment, 2001; see

www.nimh.nih.gov/child/blueprint.cfm). Further, improving the quality of mental health care and increasing access to services was delineated as a major goal of health system reform in *Healthy People 2010: Understanding and Improving Health* (U.S. Department of Health and Human Services, 2000; see www.health.gov/healthypeople/).

Although these government reports differ from one another to some extent in focus and purpose, they are remarkably similar with regard to priorities identified for reforming the mental health system. The following is a description of the major directions that have been described in these reports as well as the recent research literature.

### **Preventing Mental Health Problems**

Given the prevalence of mental health problems among children and adolescents, a logical priority for change is to prevent these difficulties by promoting mental health and reducing the risk of mental health problems. Prevention programming has been differentiated into three levels: universal, selective, and indicated (Institute of Medicine, 1994). Distinctions among these levels of prevention and examples of programs at each level are outlined in Table 1. Universal prevention refers to programming to promote mental health and to prevent the emergence of mental health problems targeted for all children in the general population. Selective prevention refers to initiatives to prevent the emergence of problems among subgroups known to be at heightened risk for unhealthy patterns of behavior. Indicated prevention refers to initiatives targeted for individuals with emerging problems or signs of risk designed to reduce the effects of risk and to prevent the emergence of serious difficulties.

Because prevention programs are designed to address the needs of individuals before they experience significant problems, either when they are healthy or displaying signs of risk, prevention efforts often are targeted for children. Further, because schools serve the needs of a very high percentage of children in this country, prevention programs often are based in schools (Short & Talley, 1997). In

particular, prevention programs often focus on periods of school transition known to be stressful for children and families, such as the transition from preschool to elementary school (e.g., Fast Track; see Conduct Problems Prevention Research Group, 2002) and the transition from elementary school to middle school (e.g., youth development programs; see Benson, 1997). Prevention efforts also have targeted after-school programs and primary care pediatric practices because they serve large numbers of healthy children (Power, DuPaul, Shapiro, & Kazak, 2003).

The science and practice of prevention is based largely upon research related to developmental psychopathology and resilience (e.g., Cicchetti & Toth, 1998; Masten & Coatsworth, 1998). A key insight derived from this research is that mental health outcomes are determined by the number and extent of risk factors as well as by protective factors in the child's life. Risk and protective factors include qualities of the individual child (e.g., cognitive, social, and self-control skills) and characteristics of the systems in which children develop (e.g., parenting skills of caregivers, attachment with a primary caregiver, and relationships with educators and community members; Masten & Coatsworth, 1998). Effective prevention programs utilize a balanced approach that involves enhancing protective factors as well as reducing risk factors (Doll & Lyon, 1998; Masten, 2001). In addition, successful programs focus on building children's skills, but they place equal or greater emphasis on changing contexts and strengthening relationships (Pianta & Walsh, 1996; Power, DuPaul et al., 2003; Sheridan & Gutkin, 2000).

### **Improving the Acceptability of Mental Health Services**

The field of mental health has a long tradition of adhering to a medical model, which purports that emotional and behavioral difficulties are inherent deficits in individuals resulting in socially undesirable consequences (Wakefield, 1997). A deficit-oriented approach minimizes the role that ecological factors serve in the development of pathology, a limitation noted by the

**Table 1**  
**Description of the Three Levels of Prevention and Examples of Programs at each Level**

Level	Description	Examples of Programs
Universal	Focuses on promoting health and preventing risk for all children	Second Step (aggression prevention; see Grossman et al., 1997)  Success for All (literacy development; see Slavin & Madden, 2001)  Collaborative to Advance Social and Emotional Learning (CASEL; see Payton et al., 2000)
Selective	Focuses on preventing risk for subgroups of children known to be at heightened risk for unhealthy patterns of behavior	First Step to Success (aggression prevention; see Walker et al., 1998)  Pathways (obesity prevention; see Davis et al., 1999)  Infant Health and Development Program (early intervention; see Infant Health and Human Development Program, 1990)
Indicated	Focuses on reducing risk for children identified as having emerging problems or signs of risk	Fast Track (prevention of conduct problems; see Conduct Problems Prevention Research Group (2002)  Primary Mental Health Project (prevention of mental health disorders; see Cowen et al., 1996)  Anger Coping Program (aggression prevention; see Lochman, 1992)

committee that prepared the *Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition* (American Psychiatric Association, 1994). By attributing problems to dysfunction within individuals, clinical care based upon a deficit-oriented model may contribute to the stigma associated with mental health services (Fantuzzo, Coolahan, & Weiss, 1995).

Alternative, strength-oriented models, based upon research related to resilience and positive psychology, have emphasized the importance of promoting competence and strengthening the contexts in which children function (Masten, 2001; Seligman & Csikszentmihalyi, 2000). Strength-oriented approaches focus upon understanding the de-

veloping child in the context of multiple systems, identifying protective factors in the child and context that support healthy development, and strengthening individual and systemic assets. It makes sense that children and adolescents would prefer a competence-promoting approach more than a deficit-oriented model, and research is beginning to demonstrate that this indeed is the case (e.g., Ginsburg et al., 2002).

Approaches to service delivery rooted in strength-oriented models are fundamentally different from those grounded in deficit-oriented models. Table 2 highlights the differences between service delivery systems based on a strength-oriented as opposed to a deficit-oriented model. Strength-oriented initiatives emphasize

a proactive approach to service delivery that stresses the importance of prevention, although it is responsive to the needs of children with identified problems who need services. Programs typically are provided in contexts that serve healthy children (e.g., schools, after-school programs, primary care pediatric settings), and the focus of programming is on strengthening children's competence and building strong relationships in the family, school, and community (Pianta & Walsh, 1996; Power, DuPaul et al., 2003).

Deficit-oriented models of service delivery, in contrast, are consistent with a reactive approach to service delivery whereby the system becomes activated in response to a referral, which is often made at a time when children and families are in crisis (Fantuzzo et al., 1995). When mental health services are provided in a reactive manner, they may be rendered in contexts in which a majority of the children are not healthy (e.g., clinics, hospitals, residential settings). In a reactive or crisis situation, the lives of children and families are greatly disrupted, the services required may need to be intense, and the cost to families may be very high. Given how strongly the mental health system has adhered to a reactive model of service delivery over the years (Fantuzzo et al.), it is not surprising that the public often has viewed the system with suspicion and distrust.

Improving the acceptability of mental health programs also depends on establishing partnerships with the community for which needs are being addressed (Nastasi, 2000). All groups in the community who have an important stake in the development of mental health services (e.g., caregivers, children and adolescents, educators, faith leaders, recreation directors, health professionals) ought to be included. Their involvement is important at every step of the process, including the phases of program design, implementation, and evaluation. The empowerment of community stakeholders throughout the process of intervention development helps to insure that the goals, methods, and outcomes of programs are meaningful, appropriate, and reasonable for the community being served (Dowrick et al., 2001; Nastasi et al., 2000).

### **Improving Access to Care**

A major barrier to care is the discontinuity between mental health service delivery systems and the help-seeking preferences of families. Mental health services often are provided in a manner that is not responsive to the priorities and needs of families. Help-seeking patterns are determined by many factors, including the financial resources of families (Padgett, Patrick, Burns, Schlesinger, & Cohen, 1993). Whether a family has health insurance and the type of insurance they have has a strong effect on their decision to seek out services (Roberts & Hurley, 1997). The lack of parity of mental health benefits compared to physical health benefits in the insurance system may greatly restrict access to mental health services (U.S. Department of Health and Human Services, 1999). Further, family income may determine whether a family can afford an insurance plan with a high degree of choice to consult with preferred mental health specialists versus one that greatly restricts access to providers. Efforts to reform public policy to ensure that all families are covered by health insurance, that mental health benefits have parity with physical health benefits, and that families are provided more options in seeking out services have been designed to reduce the financial barriers that preclude families from seeking mental health services.

Help-seeking patterns also are strongly affected by cultural factors that are associated with racial and ethnic group membership (Tucker, 2002). Families from varying racial and ethnic groups have been found to differ markedly in the patterns they use to seek out assistance for mental health concerns. For example, in an investigation of the initial attempts of families to seek mental health services, McMiller and Weisz (1996) found that African American and Hispanic/Latino families were much less likely than White families of similar socioeconomic background to pursue services from mental health professionals through formal institutions or agencies. For the African American and Hispanic families, a majority of their initial efforts to seek out help were directed towards informal networks, such as extended families, neighborhood organiza-

**Table 2**  
**Differences Between a Deficit-Oriented and Strength-Oriented Model of Service Delivery**

	Deficit Approach	Strength Approach
Model of service delivery	Reactive approach—services initiated in response to a referral	Proactive approach—programs developed in response to needs identified in the population
Contexts for programming	Services provided in contexts serving primarily children with significant problems	Programs offered in contexts serving primarily healthy children
Purpose of assessment	Focus on identifying and solving problems	Focus on identifying and promoting competence and building relationships
Purpose of programming	Emphasis on intervention, particularly crisis intervention	Emphasis on prevention, including universal, selective, and indicated levels of prevention
Outcome evaluation	Focus on problem reduction for one or a limited number of children	Focus on competence promotion and risk reduction for large groups of children

tions, or faith-based institutions. In contrast, White families were more likely to seek out services through formal networks, such as health centers, clinics, and schools.

Improving access to mental health services requires the development of a service delivery system that is responsive to the priorities, preferences, and values of the community being served. Designing community-centered programs of service is a stark contrast to the tradition of clinic-centered programming that is still prevalent in many communities, despite efforts at reform initiated through the CAASP movement (see Day & Roberts, 1991). Through partnerships with stakeholder groups in the community, fundamental issues related to the location of services, composition of the staff, and scheduling of programs need to be resolved. Efforts to respond to the needs of families and to improve the accessibility of services have contributed to the emergence of school-based mental health programs and full service schools (Reeder et al., 1997). However, although many families view the school as an acceptable and even preferred venue for men-

tal health care (Dryfoos, 1994), some families are less comfortable in schools and prefer to receive care through informal settings, such as neighborhood organizations and faith-based institutions (Power, DuPaul et al., 2003; Tucker, 2002). The optimal venue for mental health care may vary greatly across neighborhoods, and in many communities the best approach may be to provide options for mental health care in formal institutions, such as the school and primary care practice, as well as in informal institutions, such as neighborhood organizations.

### **Expanding the Resources to Provide Mental Health Services**

The resources available to address the mental health needs of children and families are not sufficient (U.S. Department of Health and Human Services, 1999). There are many ways to increase mental health resources, including enlisting and training additional personnel, and expanding the roles of available personnel and preparing them to assume new functions.

Recruiting and training additional mental health professionals is one potential strat-

egy, but it is an expensive approach and one that may not be justifiable in many communities. An alternative approach is to enlist, educate, and empower natural helpers (e.g., caregivers, community members, teenage youth) to assist in providing services. There are numerous advantages of involving natural helpers, including the enlistment of individuals who have a strong investment in the development of children in the community (Fantuzzo et al., 1995), and the provision of services in a culturally sensitive and community responsive manner (Dowrick et al., 2001). Also, natural helpers can expand the capacity of the community to provide mentoring to youth, which has been shown to be important in promoting their resilience (Vance, 2002).

Professionals from many disciplines not traditionally associated with mental health care currently provide mental health services to children, or have the potential to do so. Expanding mental health resources entails offering training and technical assistance for these professionals to be more effective in providing mental health care. For example, primary pediatric care providers have vital roles in addressing the mental health needs of children and adolescents. They often serve as the gatekeepers for mental health services and, in many cases, assume primary responsibility for intervention, particularly related to pharmacological treatments (Perrin, 1999). Primary care health professionals are in a unique position to develop relationships with children and families to promote mental health and to address risk factors when they emerge (Jellinek, Patel, & Froehle, 2002). Further, children and families often feel comfortable seeking advice from primary care providers for mental health concerns (U.S. Department of Health and Human Services, 1999).

Primary care professionals often lack training and ongoing technical assistance to function in these important roles related to the delivery of mental health services. Recently, several resources have been developed, such as the *Diagnostic and Statistical Manual for Primary Care* (Wolraich, Felice, & Drotar, 1996) and the *Bright Futures in Practice: Mental Health* (Jellinek et al., 2002), to provide guidance to

primary care providers in rendering mental health services. Given the important roles that primary care professionals serve in providing mental health care, initiatives aimed at building the capacity of these providers to render mental health services clearly are a priority (U.S. Department of Health and Human Services, 1999).

Further, mental health resources can be expanded by training mental health providers to work effectively in expanded roles (see Kolbe, Collins, & Cortese, 1997). For example, school psychologists typically are positioned in roles in which they use a reactive approach to service delivery predicated upon a referral for services because of learning, emotional, or social problems. Creating opportunities for school psychologists to take a proactive, public health approach to service delivery (see Curtis & Stollar, 2002; Fantuzzo, McWayne, & Bulotsky, 2003; Knoff, 2002; Nastasi, 2000) and preparing these professionals to make programmatic contributions as interventionists and preventionists (see Power, 2002) can expand community resources for addressing the mental health needs of children and families.

### **Improving the Quality of Mental Health Services**

Effective mental health practice requires the use of strategies that are grounded in theory and validated through empirical research (Hughes, 2000). The movement in applied psychology to identify and disseminate information pertaining to evidence-based practice has been designed largely to improve the quality of services offered in the community (see Chambless & Hollon, 1998; Stoiber & Kratochwill, 2000). However, the use of theoretically and empirically supported interventions is not sufficient for successful practice. Interventions must be adapted for use in community contexts with specific populations of children and families and validated for use under these conditions to maximize the likelihood of their success (see the description of the Clinic/Community Intervention Development Model outlined in Hoagwood, Burns, & Weisz, 2002).

Adaptation of evidence-based practices for use in community settings requires the active participation of multiple stakeholders, in-

cluding researchers or trainers, practitioners and their supervisors, and caregivers and children from the community (Nastasi et al., 2000). Through this partnership, interventions can be adapted so they are: (a) based upon scientifically grounded theory and practice; (b) responsive to the culture of the families represented in the community; (c) viewed as reasonable and appropriate for the families and children being served; and (d) perceived by practitioners as acceptable, fair, and feasible. Successful application in community settings also necessitates the use of systematic procedures to ensure that consensually validated intervention practices are being implemented by practitioners with an acceptable level of integrity (e.g., see Ehrhardt, Barnett, Lentz, Stoller, & Reifin, 1996).

Improving the quality of mental health care entails a commitment to the preparation of professionals with the competencies needed to address the priorities outlined in the Surgeon General Report on Mental Health (Power, Manz, & Leff, 2003). A National Institute of Mental Health (NIMH) Task Group (see Roberts et al., 1998), convened in 1992, established guidelines for preparing child-oriented psychologists in the competencies needed to address many of these priorities (Power, Manz et al., 2003). A distinguishing feature of this task force was that it included clinical child, pediatric, school, community, and family psychologists for the purpose of delineating guidelines pertinent for all child-oriented psychologists (see LaGreca & Hughes, 1999). It is noteworthy that many of the guidelines identified by this task force are similar to core domains included in *School Psychology: A Blueprint for Training and Practice II* (Ysseldyke et al., 1997), affirming the relevance of the NIMH training guidelines for the preparation of school psychologists (see Power, Shapiro, & DuPaul, 2003).

### **Linking Science with Practice**

The link between science and practice has been characterized as a four-stage process, including basic research, efficacy research, effectiveness research, and dissemination activities (Dodge, 2001; National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and

Deployment, 2001). Table 3 provides a brief description of each of these stages.

An initial challenge in the process is to develop a solid theoretical foundation for practice by connecting basic and efficacy research (Dodge, 2001). Conducting basic science that has the potential to inform clinical practice and conducting efficacy research that is grounded in well-substantiated theories consistent with basic research requires interdisciplinary partnerships among professionals at the basic and applied levels (Hughes, 2000; National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment, 2001). Basic researchers (such as developmental psychologists) and efficacy researchers (such as academic clinical child psychologists) typically work apart from each other in separate schools and departments. Forging interdisciplinary partnerships across the basic and applied levels can be challenging, and it requires a commitment to traverse the boundaries existing among academic departments, schools within universities, and institutions.

Another challenge in linking science and practice is connecting efficacy research with effectiveness research. Efficacy studies, or clinical trials, investigate the outcomes of interventions that have preliminary empirical support under highly controlled conditions (see Dodge, 2001). Although efficacy research has numerous strengths, including the use of a systematic intervention protocol that is implemented with a high level of integrity and the use of multiple measures to evaluate outcome, this research has noteworthy limitations. Efficacy research often fails to be responsive to cultural values and developmental needs of children and families and may not take into account real-life feasibility issues that can have an effect on service in the community.

Linking efficacy and effectiveness research involves applying evidence-based strategies supported through efficacy research in a manner that is feasible and socially valid in community-based practice. To do so requires close collaboration among researchers, practitioners, and other stakeholders, such as community and family members. Partnership-based or participatory action research methods are

**Table 3**  
**Stages in the Process of Linking Research and Practice**

Stage of Research	Description
Basic research	Research designed to understand underlying mechanisms and patterns of behavior for the purpose of theory development
Efficacy research	Research designed to evaluate the effects of intervention and prevention strategies under highly controlled conditions
Effectiveness research	Research designed to evaluate the outcomes, feasibility, and acceptability of intervention and prevention strategies in the community
Dissemination research	Research designed to evaluate the effectiveness of efforts to disseminate effective intervention and prevention strategies for wide-scale use in the community

highly useful in translating efficacy research into meaningful, effectiveness research (Israel, Schulz, Parker, & Becker, 1998; Nastasi et al., 2000). Through the use of these methods, it is possible to develop intervention and prevention programs that are based on evidence-based strategies and responsive to the priorities and needs of practitioners and community stakeholders.

Even when interventions have been designed in partnership by researchers, practitioners, and community members and have been validated for use in community settings, facilitating wide-scale implementation can be highly challenging. A common misconception is that interventions developed for use in one community can be implemented with little or no adaptation in another community (Elias & Branden, 1988). Transporting intervention strategies from one setting to another requires more than the distribution of information. Dissemination involves ongoing collaboration among trainers, practitioners, and community members. Through these partnerships, trainers and community stakeholders can adapt the findings of effectiveness research in a manner that is culturally responsive for the children and families being served and for the practitioners who deliver services (Power, DuPaul et al., 2003).

### **Implications for Child-Oriented Psychologists**

Given the priorities for change established by leaders in the field of mental health,

what are the implications for child-oriented psychologists working in and with schools? The following is a brief description of some of the implications, which will be addressed further by the articles included in this special series.

### **Increase the Emphasis on Proactive, Population-Focused Approaches**

Although numerous attempts have been made to de-emphasize an approach to service delivery that focuses on one child at a time and reacts to problems when they become crises, reactive, crisis-driven approaches continue to prevail in most schools and communities. With increased emphasis on proactive, population-focused approaches to intervention and prevention, many crises can be precluded and mental health care can become increasingly centered on asset building as opposed to deficit reduction.

### **Use Approaches that Identify and Promote Competence**

Approaches to assessment and intervention that are commonly used in schools and other settings typically focus on the identification of deficits and the resolution of problems. This orientation ignores a large body of research related to resilience and developmental psychopathology that emphasizes the importance of identifying and strengthening protective factors and competencies in developing programs of intervention and prevention.

## **Become Experts in Partnership**

Conducting research that links science and practice requires interdisciplinary partnerships among basic and applied researchers, practitioners, and community stakeholders. Adapting evidence-based strategies for use in school and community settings involves partnerships among trainers, providers, and community members. Coordinating mental health care for children requires interdisciplinary partnerships among professionals working in multiple settings. Further, implementing programs in a way that is culturally responsive and developmentally appropriate necessitates active partnerships with families and stakeholders in the community.

## **Focus on Multiple Systems in the Community**

Historically, child-oriented psychologists have focused on working with children in a limited range of settings and systems in conducting their work. For example, school psychologists traditionally have targeted their efforts on issues arising in the school setting and they may focus only on the school and family systems. Similarly, pediatric psychologists typically focus on health and family systems and may have a limited understanding of school ecology. Addressing the mental health needs of children requires an understanding of child functioning in multiple contexts and the coordination of multiple systems of care in the community, including the educational, health, mental health, child welfare, recreational, and faith-based institutions.

## **Identify and Empower Natural Helpers**

Every community has numerous assets for promoting the mental health of its children. Perhaps the greatest resources are the highly motivated and talented community members who are invested in the development of children in their neighborhoods. The effectiveness of mental health professionals can be improved through partnerships with these natural helpers, as they are invaluable in developing programs that are responsive to the culture and needs of families in the community, and they are strongly invested in the long-term sustainability of programmatic efforts.

## **Become Participatory Action Researchers**

Applied research often is centered on addressing questions developed by the research team using methods that may have little relevance to the participants being investigated. Not surprisingly, this research may be viewed by the community as unreasonable and useless. Participatory action research actively involves all major stakeholders from the community in every stage of research, which ensures the relevance of the process. This type of research is highly useful in program development and evaluation, activities that are within the scope of practice of most community-based psychologists, and not just those designated as the researchers.

## **Purpose of the Special Series**

The special series on “Emerging models for promoting children’s mental health: Linking systems for prevention and intervention” has been designed to highlight target areas in need of reform and to propose directions and models for change that can have an effect on research and practice in community and school settings. Many of the issues and themes raised in this introductory article will be further developed in this series.

Although this series is being designed for *School Psychology Review*, it is understood that many highly innovative models linking research and practice are being developed outside the formal boundaries of the field of school psychology. As such, a strong effort has been made to include contributions from national leaders whose work is closely related to school psychology but who may make their primary contributions in related fields. Further, the series is intended for school psychologists as well as child-oriented psychologists and professionals involved in developing public policy related to mental health. The following are the objectives of the series:

1. Educate school psychologists, child-oriented psychologists, and public policy professionals about critical issues that need to be addressed to promote children’s mental health.

2. Propose alternative directions for research and practice to promote children's mental health.
3. Encourage school psychologists and other child-oriented psychologists to advocate for policy changes at the national, state, local, community, and school district level that will advance mental health research and practice in the future.
4. Further strengthen the commitment of the field of school psychology to the advancement of policy, research, and practice that will promote children's mental health.

The format for this special series is different from the mini-series that have appeared in the past in *School Psychology Review*. One invited article pertaining to the theme of this special series will be included in each issue of *School Psychology Review* published in 2003. In addition, some of the issues may include unsolicited articles addressing issues that are highly related to the theme of the special series. For each invited article, several experts from within school psychology as well as those who operate primarily outside this field have been requested to provide a brief commentary that further develops the major points addressed in the invited article.

The intention is to stimulate innovative thinking and active dialogue about how to address critical issues affecting the mental health of children. It is hoped that the series will facilitate a cross-fertilization of ideas across the child-oriented mental health professions that will lead to partnerships for promoting reform.

## References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders*. (4th ed.). Washington, DC: Author.
- Benson, P. L. (1997). *All kids are our kids: What communities must do to raise caring and responsible children and adolescents*. San Francisco: Jossey-Bass Publishers.
- Burns, B. J., Compton, S. N., Egger, H. L., Farmer, E. M., & Robertson, E. R. (2002). An annotated bibliography of evidence for diagnostic-specific psychosocial and psychopharmacological interventions. In B. J. Burns & K. Hoagwood (Eds.), *Community treatment for youth: Evidence-based interventions for severe emotional and behavioral disorders* (pp. 212-276). New York: Oxford University Press.
- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, *66*, 7-18.
- Cicchetti, D., & Toth, S. L. (1998). The development of depression in children and adolescents. *American Psychologist*, *53*, 221-241.
- Conduct Problems Prevention Research Group. (2002). The implementation of the Fast Track Program: An example of a large-scale prevention science efficacy trial. *Journal of Abnormal Child Psychology*, *30*, 1-18.
- Cowen, E. L., Hightower, A. D., Pedro-Carroll, J. L., Work, W. C., Wyman, P. A., & Haffey, W. G. (1996). *School-based prevention for children at risk: The primary mental health project*. Washington, DC: American Psychological Association.
- Curtis, M. J., & Stollar, S. A. (2002). Best practices in systems-level change. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology—IV* (pp. 223-234). Bethesda, MD: National Association of School Psychologists Publications.
- Davis, S. M., Going, S. B., Helitzer, D. L., Teufel, N. I., Snyder, P., Gittelsohn, J., et al. (1999). Pathways: A culturally appropriate obesity-prevention program for American Indian schoolchildren. *American Journal of Clinical Nutrition*, *69* (supplement), 796-802.
- Day, C., & Roberts, M. C. (1991). Activities of the Child and Adolescent Service System Program for improving mental health services for children and families. *Journal of Clinical Child Psychology*, *20*, 340-350.
- Dodge, K. A. (2001). The science of youth violence prevention: Progressing from developmental epidemiology to efficacy to effectiveness to public policy. *American Journal of Preventive Medicine*, *20*(1S), 63-70.
- Doll, B., & Lyon, M. A. (1998). Risk and resilience: Implications for the delivery of mental health services in the schools. *School Psychology Review*, *27*, 348-363.
- Dowrick, P. W., Power, T. J., Manz, P. H., Ginsburg-Block, M., Leff, S. S., & Kim-Rupnow, S. (2001). Community responsiveness: Examples from under-resourced urban schools. *Journal of Prevention and Intervention in the Community*, *21*, 71-90.
- Dryfoos, J. G. (1994). *Full-service schools: A revolution in health and social services for children, youth, and families*. San Francisco: Jossey-Bass Publishers.
- Ehrhardt, K. E., Barnett, D. W., Lentz, F. E., Stollar, S. A., & Reifin, L. H. (1996). Innovative methodology in ecological consultation: Use of scripts to promote treatment acceptability and integrity. *School Psychology Quarterly*, *11*, 149-168.
- Elias, M. J., & Branden, L. R. (1988). Primary prevention of behavioral and emotional problems in school-aged populations. *School Psychology Review*, *17*, 581-592.
- Fantuzzo, J., Coolahan, K. C., & Weiss, A. D. (1995). Resiliency partnership-directed intervention: Enhancing the social competencies of preschool victims of physical abuse by developing peer resources and community strengths. In D. Cicchetti & S. L. Toth (Eds.), *Rochester Symposium on Developmental Psychopathology (Vol. 8): Developmental perspectives on trauma: Theory, research, and intervention* (pp. 463-489). Rochester, NY: University of Rochester Press.

- Fantuzzo, J., McWayne, C., & Bulotsky, R. (2003). Forging strategic partnerships to advance mental health science and practice for vulnerable children. *School Psychology Review, 32*, 18-38.
- Friesen, B. J., & Huff, B. (1996). Family perspectives on systems of care. In B. A. Stroul (Ed.), *Children's mental health: Creating systems of care in a changing society* (pp. 41-67). Baltimore, MD: Paul Brookes.
- Ginsburg, K. R., Alexander, P. M., Hunt, J., Sullivan, M., Zhao, H., & Cnaan, A. (2002). Enhancing the likelihood for a positive future: The perspective of inner-city youth. *Pediatrics, 109*, 1136-1143.
- Grossman, D. C., Neckerman, H. J., Koepsell, T. D., Liu, P. Y., Asher, K. N., Beland, K., et al. (1997). Effectiveness of a violence prevention curriculum among children in elementary school: A randomized clinical trial. *Journal of the American Medical Association, 277*, 1605-1611.
- Hoagwood, K., Burns, B. J., & Weisz, J. R. (2002). A profitable conjunction: From science to service in children's mental health. In B. J. Burns & K. Hoagwood (Eds.), *Community treatment for youth: Evidence-based interventions for severe emotional and behavioral disorders* (pp. 327-338). New York: Oxford University Press.
- Hughes, J. N. (2000). The essential role of theory in the science of teaching children: Beyond empirically supported treatments. *Journal of School Psychology, 38*, 301-330.
- Infant Health and Development Program. (1990). Enhancing the outcomes of low-birth-weight, premature infants: A multi-site, randomized trial. *Journal of the American Medical Association, 263*, 3035-3042.
- Institute of Medicine. (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, DC: National Academy Press.
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health, 19*, 173-202.
- Jellinek, M., Patel, B. P., & Froehle, M. C. (Eds.). (2002). *Bright futures in practice: Mental health—Vol. I. Practice guide*. Arlington, VA: National Center for Education in Maternal and Child Health.
- Kendall, P. C., Flannery-Shroeder, E., Panichelli-Mindel, S. M., Southam-Gerow, M., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology, 65*, 366-380.
- Knoff, H. M. (2002). Best practices in facilitating school reform, organizational change, and strategic planning. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology—IV* (pp. 235-253). Bethesda, MD: National Association of School Psychologists Publications.
- Kolbe, L. J., Collins, J., & Cortese, P. (1997). Building the capacity of schools to improve the health of the nation: A call for assistance from psychologists. *American Psychologist, 52*, 256-265.
- LaGreca, A. M., & Hughes, J. N. (1999). United we stand, divided we fall: The education and training of clinical child psychologists. *Journal of Clinical Child Psychology, 28*, 435-447.
- Lochman, J. E. (1992). Cognitive-behavioral intervention with aggressive boys: Three year follow-up and preventive effects. *Journal of Consulting and Clinical Psychology, 60*, 426-432.
- Loeber, R., & Stouthamer-Loeber, M. (1998). Development of juvenile aggression and violence: Some common misconceptions and controversies. *American Psychologist, 53*, 242-259.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.
- 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.
- McMiller, W. P., & Weisz, J. R. (1996). Help-seeking preceding mental health clinic intake among African American, Latino, and Caucasian youths. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 1086-1094.
- MTA Cooperative Group. (1999). A fourteen-month randomized clinical trial of treatment strategies for attention deficit hyperactivity disorder. *Archives of General Psychiatry, 56*, 1073-1086.
- Nastasi, B. K. (2000). School psychologists as health-care providers in the 21<sup>st</sup> century: Conceptual framework, professional identity, and professional practice. *School Psychology Review, 29*, 540-554.
- Nastasi, B. K., Varjas, K., Schensul, S. L., Silva, K. T., Schensul, J. J., & Ratnayake, P. (2000). The participatory intervention model: A framework for conceptualizing and promoting intervention acceptability. *School Psychology Quarterly, 15*, 207-232.
- National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment. (2001). *Blueprint for change: Research on child and adolescent mental health*. Washington, DC: Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Mental Health.
- National Association of State Mental Health Program Directors and the Policymaker Partnership for Implementing IDEA at the National Association of State Directors of Special Education. (2002). *Mental health, schools and families working together for children and youth: Toward a shared agenda*. Washington, DC: U.S. Department of Education, Office of Special Education Programs.
- Padgett, K., Patrick, C., Burns, B., Schlesinger, H., & Cohen, J. (1993). The effect of insurance benefit changes on use of child and adolescent outpatient mental health services. *Medical Care, 31*, 96-110.
- Payton, J. W., Wardlaw, D. M., Graczyk, P. A., Bloodworth, M. R., Tompsett, C. J., & Weissberg, R. P. (2000). Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth. *Journal of School Health, 70*, 179-185.
- Perrin, E. C. (1999). Commentary: Collaboration in pediatric primary care: A pediatrician's view. *Journal of Pediatric Psychology, 24*, 453-458.
- Phelps, L., Brown, R. T., & Power, T. J. (2002). *Pediatric psychopharmacology: Combining medical and psycho-*

- social interventions*. Washington, DC: American Psychological Association.
- Pianta, R. C., & Walsh, D. (1996). *High-risk children in the schools: Creating sustaining relationships*. New York: Routledge.
- Power, T. J. (2002). Preparing school psychologists as interventionists and preventionists. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp. 1047-1065). Bethesda, MD: National Association of School Psychologists Publications.
- Power, T. J., DuPaul, G. J., Shapiro, E. S., & Kazak, A. E. (2003). *Promoting children's health: Integrating school, family, and community*. New York: Guilford Press.
- Power, T. J., Manz, P. H., & Leff, S. S. (2003). Training for effective practice in schools. In M. Weist, S. Evans, & N. Tashman (Eds.), *School mental health handbook* (pp. 257-273). Norwell, MA: Kluwer Academic/Plenum Publishers.
- Power, T. J., Shapiro, E. S., & DuPaul, G. J. (2003). Preparing psychologists to link the health and educational systems in managing and preventing children's health problems. *Journal of Pediatric Psychology*, 28, 147-156.
- Reeder, G. D., Maccow, G. C., Shaw, S. R., Swerdlik, M. E., Horton, C. B., & Foster, P. (1997). School psychologists and full service schools: Partnerships with medical, mental health, and social services. *School Psychology Review*, 26, 603-621.
- Roberts, M., Carlson, C., Erickson, M., Friedman, R., LaGreca, A., Lemanek, K., et al. (1998). A model for training psychologists to provide services for children and adolescents. *Professional Psychology: Research and Practice*, 29, 293-299.
- Roberts, M. C., & Hurley, L. K. (1997). *Managing managed care*. New York: Plenum Press.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive developmental psychopathology, 55, 5-14.
- Shaffer, D., Fisher, P., Dulcan, M. K., Davies, M., Piacentini, J., Schwab-Stone, M. E., et al. (1996). The NIMHD Diagnostic Interview Schedule for Children Version 2.3 (DISC-2.3): Description, acceptability, prevalence rates, and performance in the MECA Study (Methods for the Epidemiology of Child and Adolescent Mental Disorders Study). *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 865-877.
- Sheridan, S. M., & Gutkin, T. B. (2000). The ecology of school psychology: Examining and changing our paradigm for the 21<sup>st</sup> century. *School Psychology Review*, 29, 485-502.
- Short, R. J., & Talley, R. C. (1997). Rethinking psychology in the schools: Implications of recent national policy. *American Psychologist*, 52, 234-240.
- Slavin, R. E., & Madden, N. A. (2001). *One million children: Success for all*. Thousand Oaks, CA: Corwin.
- Stoiber, K. C., & Kratochwill, T. R. (2000). Empirically supported interventions and school psychology: Rationale and methodological issues—Part I. *School Psychology Quarterly*, 15, 75-105.
- Stroul, B. A., Friedman, R. M., Hernandez, M., Roebuck, L., Lourie, I. S., & Koyanagi, C. (1996). Systems of care in the future. In B. A. Stroul (Ed.), *Children's mental health: Creating systems of care in a changing society* (pp. 41-67). Baltimore, MD: Paul Brookes.
- Tucker, C. M. (2002). Expanding pediatric psychology beyond hospital walls to meet the health care needs of ethnic minority children. *Journal of Pediatric Psychology*, 27, 315-323.
- 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 Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- U.S. Department of Health and Human Services. (2000). *Healthy people 2010: Understanding and improving health*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2001). *Mental health: Culture, race, and ethnicity: A supplement to mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- Vance, J. E. (2002). Mentoring to facilitate resiliency in high-risk youth. In B. J. Burns & K. Hoagwood (Eds.), *Community treatment for youth: Evidence-based interventions for severe emotional and behavioral disorders* (pp. 139-153). New York: Oxford University Press.
- Wakefield, J. C. (1997). When is development disordered? Developmental psychopathology and the harmful dysfunction analysis of mental disorder. *Development and Psychopathology*, 9, 269-290.
- Walker, H. M., Kavanaugh, D., Stiller, B., Golly, A., Severson, H. H., & Feil, E. G. (1998). First step to success: An early intervention approach for preventing school antisocial behavior. *Journal of Emotional and Behavioral Disorders*, 6, 66-80.
- Wolraich, M. L., Felice, M. E., & Drotar, D. (Eds.). (1996). *The classification of child and adolescent mental diagnoses in primary care: Diagnostic and statistical manual for primary care (DSM-PC)—Child and adolescent version*. Elk Grove Village, IL: American Academy of Pediatrics.
- Ysseldyke, J., Dawson, P., Lehr, C., Reschly, D., Reynolds, M., & Tetzlow, C. (1997). *School psychology: A blueprint for training and practice II*. Bethesda, MD: National Association of School Psychologists.

Thomas J. Power received his Ph.D. in Psychology in Education from the University of Pennsylvania in 1984 and is Associate Professor of School Psychology in Pediatrics at University of Pennsylvania School of Medicine. His research interests include assessment and intervention for children with ADHD, family-school collaboration, and prevention/health promotion. He is Associate Editor of *School Psychology Review*.