Issues in Clinical Child Psychology

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Editors

Handbook of

School Mental Health

Research, Training, Practice, and Policy

Second Edition

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For Amber, with love and thanks for being the foundation for my life and career (MW).

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To Stephen, my husband and best friend—you always know exactly how to support me in achieving my goals both at home and at work (JO).

About the Editors

Mark D. Weist. Ph.D., received his doctorate in clinical psychology from Virginia Tech and is currently a Professor in the Department of Psychology at the University of South Carolina. He was on the faculty of the University of Maryland School of Medicine (UMSM) for 19 years where he helped to found and directed the Center for School Mental Health, currently the only federally funded center providing leadership to the advancement of school mental health (SMH) policies and programs in the USA. He has led a number of federally funded research grants, has advised national research- and policy-oriented committees, has testified before the Congress, and has presented to the President's New Freedom Commission on Mental Health. He helped to found the International Alliance for Child and Adolescent Mental Health in Schools (INTERCAMHS). Dr. Weist has edited six books and has published and presented widely in the SMH field and in the areas of trauma, violence and youth, evidence-based practice, and cognitive behavioral therapy. With colleagues from the Clifford Beers Foundation and the UMSM, he started the journal *Advances in School Mental Health Promotion.*

Nancy A. Lever, Ph.D., received her doctorate in clinical psychology from Temple University and completed her psychology internship and postdoctoral fellowship at the University of Maryland School of Medicine (UMSM). In 1998, she joined the Division of Child and Adolescent Psychiatry at UMSM as a faculty member and currently is an Associate Professor. She provided school mental health (SMH) services within a dropout prevention program for 10 years and facilitates a national practice group on connecting SMH with juvenile justice and dropout prevention. Dr. Lever directs two SMH programs in Baltimore City. In 1996, she joined the Center for School Mental Health (CSMH; http://csmh.umaryland.edu), a national resource center for advancing SMH research, training, policy, and practice. She served for many years as the CSMH Director of Training and Outreach. In July 2010, she was appointed the Codirector of the CSMH. She helps to facilitate the National Community of Practice on Collaborative School Behavioral Health (http://www.sharedwork.org/web/school-behavioral-health/home) and represents the CSMH on local, state, and national committees. She has been a driving force in advancing training related to SMH and has coordinated training experiences for psychology interns, psychiatry fellows, postdoctoral fellows, and SMH professionals. She has presented and written extensively

about SMH and is coeditor of the first edition of the *Handbook of School Mental Health*.

Catherine P. Bradshaw, Ph.D., M.Ed., is a Professor and the Associate Dean for Research and Faculty Development at the Curry School of Education at the University of Virginia (UVA). Prior to her current appointment at UVA, she was an Associate Professor and the Associate Chair of the Department of Mental Health at the Johns Hopkins Bloomberg School of Public Health. She maintains an affiliation with Johns Hopkins as the Deputy Director of the CDC-funded Johns Hopkins Center for the Prevention of Youth Violence and Codirector of the NIMH-funded Johns Hopkins Center for Prevention and Early Intervention. She holds a doctorate in developmental psychology from Cornell University and a master's of education in counseling and guidance from the University of Georgia. Her primary research interests focus on the development of aggressive behavior and school-based prevention. She collaborates on federally supported randomized trials of school-based prevention programs, including Positive Behavioral Interventions and Supports (PBIS) and social-emotional learning curricula. She also has expertise in implementation science and coaching models. Dr. Bradshaw works with the Maryland State Department of Education and several school districts to support the development and implementation of programs and policies to prevent bullying and school violence and to foster safe and supportive learning environments. She collaborates on federally funded research grants supported by the NIMH, NIDA, CDC, and the Institute of Education Sciences. She is an Associate Editor for the *Journal of Research on Adolescence* and the Editor Elect of *Prevention Science*.

Julie Sarno Owens, Ph.D., received her doctorate in clinical psychology from Purdue University and completed her clinical internship at the University of Florida, Health Sciences Center, in the rural/primary care track. Dr. Owens is an Associate Professor in the Department of Psychology at Ohio University and Co-Director of the Center for Intervention Research in Schools. Her research focuses on the development and evaluation of school-based interventions for elementary school-aged youth with attention-deficit/hyperactivity disorder (ADHD) and disruptive behavior problems. Her studies examine (a) the effectiveness and feasibility of transporting empirically supported interventions into schools in underserved rural communities; (b) parents' and teachers' perceptions, satisfaction, and acceptability of such treatments; and (c) factors that either enhance or interfere with the transportation, dissemination, and sustainability of such treatments in rural communities. Dr. Owens is the Director of the Youth Experiencing Success in School (Y.E.S.S.) Program, a school-based mental health program that integrates evidence-based interventions for youth with ADHD into the school setting. The Y.E.S.S. Program, which has developed in the context of a 12-year university-community partnership, involves intervention development and evaluation research, practical training opportunities for graduate and undergraduate students, professional development training for local educators and mental health professionals, and treatment services for youth in our local region. As such, the work emerging from the Y.E.S.S. Program has implications for the research, practice, training, and policy agendas at the local and national levels.

Commentary 1

Infusing the School Mental Health Knowledge Base Into Educational Practice: An Empirical Basis for Positive Change

The editors of this handbook are distinguished by their respective, seminal contributions to the field of school mental health. They have assembled a remarkably accomplished cadre of contributors to this volume whose chapters provide broad coverage of the school mental health landscape. This book is a rich resource for educators and mental health professionals alike, and the field is fortunate to have it.

If we are ever able to achieve the goal of effectively addressing the needs of the approximately 20 % of K-12 students who struggle with serious challenges to their emotional and behavioral health, the application of this handbook's content and methodology will have accounted for substantial parts of its realization. I remain optimistic that school mental health approaches and knowledge will eventually become fully integrated into the service systems of school districts as a matter of course. However, there are powerful forces currently arrayed against such an outcome by educational gatekeepers who remain concerned about costs, potential parent-initiated lawsuits about inadequate services, resistance to assuming ownership of the mental health problems of students, and maintaining territorial imperatives and professional identities. To note just one of the many negative consequences of this state of affairs, the availability of wraparound services and access to family therapy and mental health supports should be routinely available to tertiary-level students identified within school systems—but they are not routinely available by any means. Policy experts in the school and mental health professions need to come together and design collaborative partnerships and mutual support systems that make school settings more responsive to the mental health needs of students while supporting the primary mission of schooling which is academic performance and achievement. This is an enormous challenge that begs for a solution as schools nationally continue to certify less than 1 % annually of the K-12 student population as qualifying for mandated special education services to address their emotional and behavioral problems (Forness, Freeman, Paparella, Kauffman, & Walker, 2012).

It is encouraging to see chapters in the handbook that address key features of this ongoing challenge such as (a) funding models in delivering school

mental health services, (b) the relationship between special education law and mental health issues, and (c) the role of school mental health in supporting students within general educational classrooms. Solving these and related problems associated with appropriate roles for mental health professionals and the services they can deliver is a critical step in forging a workable collaboration among schools and mental health services. The key question in this regard is how these services and supports can be delivered in a manner that does not disrupt the teaching-learning process, leads to educators' acceptance of them, and addresses student needs. The two chapters on mental health consultation in schools and how to do it effectively and seamlessly are of critical importance in this regard. For far too long, we have pressured schools and educators to make adjustments in their ongoing operations and normal routines in order to accommodate delivery of mental health services. Kimberly Hoagwood (see Burns & Hoagwood, 2002) has cogently argued in numerous venues over the past decade that the reason many of our evidence-based interventions fail is because they do not fit well or accommodate these important routines and operations. Students with mental health challenges that disrupt the schooling experience for themselves and others and that lower their quality of life are the victims, and losers, in this ongoing struggle.

There is a clear and largely unmet need for a set of inquiries among intervention developers, and their end users, to study schools and school systems systematically in order to identify those characteristic features of direct interventions that produce educator acceptance and continued use of them. I believe this is a primary reason that the Positive Behavioral Interventions and Supports (PBIS) model or approach has been so successful among educators. In just over 14 years or so, PBIS has been adopted by nearly 20,000 schools in the USA, and it has simultaneously gained the respect of numerous mental health professionals currently working in schools. In developing the PBIS model, Rob Horner, George Sugai, and their colleagues carefully studied school systems, their operations and routines, and importantly their stated needs, values, and priorities. In doing so, they ensured a high level of acceptance from educational consumers and gatekeepers as they systematically took these factors into account in designing PBIS. Further, they adopted and adapted for schools' use the Institute of Medicine's classification of primary, secondary, and tertiary prevention as a delivery framework for PBIS. School administrators particularly resonate to the PBIS' use of universal, selective, and indicated interventions matched to these three types of prevention. In my career, I have seen a number of innovative, groundbreaking approaches develop but never one that approaches PBIS in the scale of its acceptance, adoption, and implementation. The reasons underlying this remarkable development are not elusive or complex but highly predictable if one understands the culture and ecology of schooling.

I want to reemphasize the importance and relevance of the handbook's content. In my view, it covers all the important topics and issues that impinge on the exemplary practice of school mental health in an educational context. Engaging parents and youth in making interventions work more effectively, screening and early identification of at-risk students to allow prevention through early intervention, and describing best evidence-based practices for

targeted problems (ADHD, depression and suicide prevention, bullying, relational aggression, anxiety disorders, and so on) are of critical importance in meeting the needs of K-12 students. Today's students access most of their mental health services through the venue of schooling, but the quality and amount of those services is often abysmal. This handbook provides a compendium of the best knowledge, the best thinking, and the best practices currently available to schools in addressing the challenges of so many students who are exposed to many risk factors in family and community contexts and who have very few offsetting protective factors. It is wonderful to have such a rich and well-developed knowledge base in school mental health as represented by this volume. The great challenge we face is how to connect these at-risk students and their families to effective services and supports based on this information.

This handbook is divided among strategies that can be implemented outside the confines of the school setting to address student mental health problems and disorders and those that require direct intervention within the school setting in order to address this goal. Partnering with families to strengthen mental health efforts to address a student's emotional or behavioral challenges is an example of the former; the school-based treatment of anxiety disorders is an example of the latter. Delivery of both types of strategies can be problematic, but those that require direct intervention in the school setting are especially complex and difficult. I see the material in this handbook as advancing our thinking and efficacy on both these fronts. I congratulate the handbook's editors and the chapter contributors for producing such a high-quality, timely, and much needed resource. Now, we must find a way to deliver and apply this knowledge so that it maximally impacts our most vulnerable students.

Eugene, OR, USA Hill M. Walker

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Commentary 2

From Collaboration to Integration: The Collective Responsibility for Improving Mental Health Service Delivery

It has been well documented for decades that schools and communities have been under-identifying and underserving youth with or at risk of emotional/behavioral disabilities. Unfortunately, the impetus for change is human suffering inflicted upon many due to untreated needs of youth. The consequences are tragic and include suicides, shootings, and other disasters, some occurring in schools and universities and others that manifest in adulthood. Detention centers and prisons are filled with people with undiagnosed and/or untreated mental health needs, many of which could have been prevented from intensifying over time. The education system has lacked the resources, ability, and confidence to effectively address mental health needs as part of their role, and everyone recognizes that schools cannot meet this challenge alone. Although there is no simple "fix" for such complex issues, the *Handbook of School Mental Health, Second Edition*, is a needed resource to guide the development of an effective system of mental health in schools.

Educators and community mental health providers and families have the same desired outcomes—high school completion, postsecondary education, and employment. These are indicators of healthy, happy, and productive citizens. But we have historically struggled to develop an integrated and, therefore, efficient system that delivers these outcomes for the increasing numbers of youth with demonstrated social/emotional needs. Efforts to collaborate are longstanding as Jane Knitzer's vision of a *System of Care* has been a national focus for the past 20–25 years. But clearly more strategic effort is needed. We need to move beyond agency/school personnel merely becoming familiar with each other's work, perhaps having some staff work with each other at the student/family level or setting up a referral process for each other's separate programs. We recognize these attempts at collaboration fall short as the continuation of separate decision-making and planning structures perpetuates limited service delivery and poor outcomes. I am hopeful that the information in this book can help move us closer to a comprehensive integration of mental health in schools as it represents not only the depth of knowledge needed but outlines progressive systems applications.

The content of this book supports an "Interconnected Systems Framework" in which educators and community providers work through an integrated system with a single (combined) planning and decision-making framework. This involves changes in policy and funding structures to ensure that relevant data guides access to a full continuum of supports at the school and district/community levels. Blended school/community teams need to be constantly looking at progress indicators and making necessary changes in service delivery to make sure "all" youth experience success. This requires systems of prevention where early warning signs trigger immediate support that the youth and families experience as positive and doable within their daily lives and culture. This book provides valuable information to inform the development of such systems. It includes specifics of interventions and collaborations that address the mental health issues that schools need supportive partnerships to effectively address. Chapters specifically address how youth, families, and community representatives need to be active participants in these systems.

Although actualizing integrated systems of mental health care through school and community partnerships has proven to be challenging, I believe we are rapidly moving closer to embracing this essential responsibility. This *Handbook of School Mental Health, Second Edition*, is aptly named as it succinctly addresses the pivotal issues educators and mental health professionals need to confront if more efficient and effective systems of support are to be established. For example, the chapters on prevention and screening in schools, coaching classroom-based interventions, and mental health consultation with teachers outline service delivery directly linked to classrooms and teachers. Chapters on tiered interventions and the integration of school-wide system of Positive Behavioral Interventions and Supports (PBIS) illustrate how existing intervention systems in schools can be enhanced through school mental health participation. And chapters on the specifics of intervening effectively with childhood conditions such as ADHD, anxiety, and trauma-induced depression provide the deeper knowledge educators need to support the full range of mental health needs students bring with them to school every day.

Historically, mental health and social/emotional growth have been considered the job of special educators, mental health providers, and school administrators. But the concepts of expanded school mental health and multi-tiered systems that ensure a wider range of interventions for more youth sooner are helping broaden the context. The editors of this book recognize what needs to change as evidenced by their content and author selections. This book supports the concept that the work of teachers should be augmented by the integration of clinical staff and intervention systems. Teachers should be fully aware of a full continuum of interventions and should be part of decisions about which data points should trigger a defined intervention or support for a student; they should be fully cognizant of and confident in systems that allow them to quickly and efficiently refer students for a range of simple to more complex interventions.

Working in schools is both a vocation and a responsibility. A healthy school climate requires that all adults have an equal commitment to both academic and social/emotional learning for "all" students, including those

who experience mental health challenges. We have reached the point where leaders know, and hopefully expect, that everyone who works in schools has the potential to be a provider of mental health support to students as well as to each other—not just the clinicians and the special education staff but the music teacher, the 5th grade teacher, the school secretary, and the security staff. As described throughout this book, the necessary system structures to make that happen have to be installed. These include integrated funding, data-based decision making, policies, etc. Community/school leaders must be committed to this system development as knowledge about effective interventions can be fruitless if not delivered and monitored in a planful manner where mental health professionals, educators, families, and students work together in teams to use data to solve problems. The barometer of success is if all students, especially those most vulnerable, can experience the benefit of academic as well as social/emotional achievement.

Schools have been recognized as the likely location to ensure the early identification and treatment of youth with mental health needs, and this book provides a much needed road map of how to make that happen. Interventions that work are outlined and specific applications are described. Our challenge is to embrace the organizational and system changes needed to make mental health prevention and intervention part of what schools and communities expect and prioritize.

Springfield, IL, USA Lucille Eber

Commentary 3

Key Themes for School Mental Health: Organizational Context, Implementation, and Collaboration

As school and school district leaders throughout North America seek timely knowledge to support student mental health and well-being, they will find this edited volume to be a valuable and practical resource that they return to time and again. Each chapter provides state-of-the-art information but also a unique relevant lens on school mental health. The editors have carefully selected topics and contributors that punctuate the necessary integration of science, policy, and practice for effective uptake of evidence-informed practices in schools and districts.

For those wishing to access a current synthesis of research related to common mental health problems observed in school settings, the handbook contains concise summaries of the evidence from leaders in the field related to school-based prevention and intervention for difficulties such as depression, ADHD, and relational aggression. The editors recognize, however, that this is only part of the school mental health story. Also critical to the concept of expanded school mental health is keen attention to (1) organizational conditions, (2) effective implementation protocols, and (3) meaningful collaboration.

Organizational Conditions

In this volume, considerable focus is afforded to organizational receptivity and stage-setting for effective school mental health. Authors discuss the importance of system infrastructure, highlighting, for example, the key issue of funding models and the need for coordinated and consistent protocols for screening, assessment, and early identification. Training, in the form of preservice preparation as well as ongoing systematic professional development and consultation, is also featured as a foundational element for service delivery in school mental health. As it is often these organizational conditions that facilitate or impede the uptake of high-quality programs and services, school district leaders will benefit from careful consideration of the key principles noted in these chapters.

Related, the editors model a system perspective by including coverage of comprehensive service delivery models, most drawing on a multi-tiered approach. It is imperative that school district leaders and policy officials take this wide lens on school mental health to avoid the all too common phenomenon of adopting a patchwork of disconnected and sometimes duplicative programs and services. Further, a mental health-promoting approach that focuses on universal, whole school/community efforts in supporting wellness is consistent with aligned initiatives in schools, making it easier for leaders to embed positive mental health programming into district and school strategies and planning cycles (Joint Consortium for School Health, 2010; Rowling 2009).

Effective Implementation Protocols

In recent years, substantial research attention has rightly been devoted to knowledge translation and exchange, transportability, implementation with fidelity, and scale-up of evidence-informed programs and strategies within clinical and school settings (e.g., Barwick et al., 2005; Fixsen, Blasé, Horner & Sugai, 2009; Schoenwald & Hoagwood, 2001; Straus, Tetroe, & Graham, 2009). This is an important evolution in our science, as we reach beyond determining what works, to grappling with the tension between existing and ideal conditions for optimizing the uptake of research-based practices. This new focus for study centers on methods for effectively bridging research and practice and has helped us to recognize that *how* we introduce and support mental health promotion, prevention, and intervention programming in schools is a key factor in effectiveness. This understanding has been reflected within the handbook as authors highlight the importance of considering implementation variables when introducing prevention and intervention programs and services in schools. Attention to the unique needs of special populations, like families from ethnocultural communities or the military, is also a part of implementation integrity and is highlighted in this volume.

Meaningful Collaboration

The editors of the handbook clearly recognize that school mental health occurs within a wider context. Key players within schools need the expertise and engagement of family, student, community, and university partners in order to fully achieve the potential of expanded school mental health. Key to this collaborative enterprise is the identification of leaders within school districts who will champion the process and will involve stakeholders in fashioning the vision for school mental health in the district, the comprehensive strategy for achieving core goals, and the coordinated implementation/action plan that includes attention to organizational conditions and protocols for partnership. This volume brings a strong focus on the voices of families and youth, offering an excellent reminder to district and school staff of the

valuable contribution that these stakeholders can bring, if we provide a safe and welcoming space for them.

These categories—organizational conditions, implementation, and collaboration—are somewhat synthetic and are indeed interconnected, but there is value in highlighting that school mental health is more than embedding "what works" in schools. It is about setting the stage to facilitate meaningful, collaborative, and sustained systems of care for our children and youth. The handbook offers state-of-the-art coverage of this broad range of considerations and will be an asset to practice and policy leaders with responsibility for school mental health throughout North America.

Finally, it is important to note that while the knowledge summarized in this volume has been primarily informed by the US experience, it will have equal relevance within Canadian jurisdictions though our health and education systems differ in many ways. The central themes, enablers, and obstacles identified are familiar, and the models and programming recommendations are readily translated and contextualized. In fact, there is particular value in co-learning across countries and journeying together as discoveries are made and experiences shared in the interest of advancing school mental health for all of our children and families.

Hamilton, ON, Canada Kathy H. Short

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Commentary 4

Data-Informed Decision Making and Evidence-Based Programs in Schools: Expanding the Vision, Improving the Practice

Data-driven decision making and evidence-based practice are buzzwords found in almost any commentary on improving educational outcomes, although we prefer the term data-informed decision making because we believe that data can help inform accountable judgment and not replace judgment. While many educators embrace the concepts and endeavor to use data to some extent, their practices are limited when it comes to using data to inform their work. Being data-informed is often reduced to examining end-of-year or end-of-program performance and attempting to use limited data to improve practice for the next go-round. This is too little, too late. Not only does waiting until the end of a program rule out using data to make midcourse corrections, the end-of-year data tends to focus only on outcomes. Data that could have identified antecedents to those outcomes is typically absent and, after the fact, may be impossible to collect. Similarly, some educators consider their choice of programs to be evidence-based because they find a few studies with positive outcomes (often provided by a vendor) before they make the decision to purchase or invest in a program. In these cases, practice in the field falls short of the intent to use data wisely to increase the chances of obtaining successful educational outcomes or improving programs and practices.

When the lack of good evidence in the decision-making process has the likely result of spending time and resources to implement programs that do not work as planned, there are at least two significant consequences. First, there are consequences for students who do not get the benefits that they need, and in the cases of intervention programs, these may be benefits that students desperately need in a timely manner. The time that they lose to ineffective instruction or services is the time irretrievably lost, and sometimes critical to a student's well-being. Second, there are real and opportunity costs that are lost. Investing in a program that does not work is expensive in terms of real monetary and human resource costs and also presents an opportunity cost since the resources being used ineffectively are unavailable for more useful purposes. Moreover, if there is significant expense involved, there is a tendency to continue programs or practices simply because they are paid for, even if they are of dubious effectiveness.

What would improve the status of data-informed decision making and use of evidence-based programs? Educators need to expand their view of being data-informed from a tradition of examining outcomes at the end of a program or intervention to a vision that includes collecting and using data systematically—at key points throughout a project to plan and then continually monitor and adjust programs to increase the likelihood that the desired outcomes will be met. Educators often lack a background in the fundamentals of interpreting data and almost never have a background in research and evaluation that would help them think about how and when data would be helpful to them. Fortunately, the background in research, evaluation, and measurement that school mental health professionals bring to the table can make a significant contribution to improving the practice of using data wisely to inform decisions.

Educators at all levels are inundated with data, but rarely are data needs systematically framed and data collected and presented in ways that efficiently and effectively guide success. Innovation, effective program implementation, and school improvements in general can benefit from data that comes from an evaluation model that provides a stepwise process for planning, implementation, and evaluation (not typical in the commonly held models currently used in schools). Instead of waiting until the end of a program and asking if it worked, the expanded model for data-informed decision making should include a variety of data collected frequently throughout program implementation to increase the chances of the program working as intended. Getting To Outcomes® (GTO®) (the trademark is registered by the University of South Carolina and RAND) provides a framework that can be used at all levels—district, school, and classroom—to identify the kinds of information that will support success and to link data effectively to the change process (e.g., Chinman, Imm, & Wandersman, 2004). This is a model that takes the mystery out of evaluation and accountability and is designed to help achieve results.

GTO provides an evidence-based approach to guide effective change and eventual accountability for outcomes that can serve as an important part of a school's data toolbox. GTO is a comprehensive approach that includes all of the following crucial elements for success: *needs and resource assessment, goals and desired outcomes, evidence-informed best practices, fit and cultural competence, capacity, planning, implementation and process evaluation, outcome evaluation, continuous quality improvement, and sustainability*. It expands the role of using data to inform practice from after-the-fact questions like "Did it work?" and "What do we need to change for the next time?" to proactive questions like "What do we need to know as we go along so that we improve our chances to successfully move forward?" and "How do the answers to our questions inform what we need to do now to make what we are doing even better?"

How might one go about fostering the use of data to increase the chances of a program's success and broaden the definition of informed decision making? Professional development aimed at data use is one component of a solution, but not a sufficient one. Educators need to develop their expertise and their dispositions to use effective data practices. To address both, one course of action that can be taken from almost anywhere in the organization is to model the expanded approach to using data in conjunction with the development

and implementation of a new program or innovation, to team with others in using data well, and to talk with colleagues about the process and its benefits. These conversations are likely to result in both a more successful implementation and a growing awareness among fellow educators about how broader approaches to data use can benefit the educational organization.

The old adage "seeing is believing" applies in school settings: teachers lead by example. Teachers who see how colleagues make good use of data, hear fellow educators attribute some of their success to the benefits of data-informed decision making, and see that understanding and using data for improvement is both beneficial and within their grasp are more likely to do so themselves. Echoing this sentiment, Markle, Splett, Maras, and Weston (this volume) call for increased data-informed decision making among teams that operate within schools. In addition, they note that training in data-informed decision making is needed to help educators identify the appropriate data to collect, design valid and reliable tools for collecting data, analyze the data, interpret the data, and feed the data back into the decision-making process.

Leading by example and modeling desired changes in behavior are good first steps in leading change, but personnel in schools have options to take them a step further. Teachers sometimes model thinking and problem solving for their students using "think-alouds" where the teacher or students verbalize their logic to improve understanding and develop similar thinking strategies. This same approach has the potential to leverage the role of school mental health professionals as leaders for improving data-based decision making in their schools. If you are such a leader, that is, leading by example, imagine yourself expanding that role by performing think-alouds with your colleagues with the intent of helping them think through the GTO steps to learn more about using data well. What could your fellow educators learn from you if, as you rolled out a project, you clearly articulated the *needs and resources* behind it? Would colleagues similarly seek and reach agreements about needs and resources and then set *goals* before embarking on their own projects and programs? What would happen if you reported on your search for *best practices* and your thinking about why they would or would not *fit* your school setting? Would your fellow educators become more critical consumers of programs and practices? Would your example lead others to similarly vet "evidence-based" and "best practice" information for their own programs and changes in practice? What would happen if you carefully articulated your thinking about *capacity* before starting a program and spelled out the time, financial support, and investment of human capital that your project requires? Would modeling this behavior avoid false starts and later difficulties in *sustaining* a program because colleagues would learn to assess capacity as part of their own *program planning* and do it in a more realistic fashion? What would happen if you showed how you *monitored implementation* and made midcourse corrections, clarifying for your colleagues that having that information and acting on it lead to more successful *outcomes*? Would your pattern of behavior, made transparent through your conversations with others, encourage others to do this type of *continuous quality improvement*? Would systematic and regular use of data become *sustained*— "the way we do things around here?"

If data is really going to be used for improvement, educators need to expand the commonplace vision of being data-informed and evidence-based and must then translate that expanded vision into practice. Changing how schools use data calls for both enhancing what educators know about how data can be leveraged for improvement and building into school culture the will to do so. That change in culture begins with visible changes in the practices of individuals. You can lead that change by embracing the change you want to see happen and by making that change transparent enough for others to emulate. Ranging from calls for 21st Century Skills and the Common Core State Standards to customized learning and student-centered schools, demands for change and transformation are everywhere. They make the jobs of educators a lot more complex, a lot riskier, and a lot more exciting. We (an academic/program evaluator and a school administrator) propose that the new mandates make it essential to rethink our approaches to using data. We join the others in this handbook in helping to illuminate how to move forward, and we assert that education requires leadership and vision that can come from many corners, including that of school mental health professionals.

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Debra Hamm

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Further Advancing the Field of School Mental Health

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We are pleased to bring to you this second edition of the *Handbook of School Mental Health*, with each of us involved in careers that emphasize bringing effective programs and services to promote students' positive behavior, health, mental health, and academic success in the most universal setting, "where they are," in schools. We have all been deeply involved in training, practice, research, and policy in the emerging and increasingly prominent school mental health (SMH) field, as well as in efforts to interconnect work occurring in each of these four realms of action.

School mental health is based on some simple yet cogent observations. First, the mental health system is broken, especially for children and adolescents (President's New Freedom Commission, 2003; United States [U.S.] Public Health Service, 2000). Families must navigate many obstacles to obtain care for their children in the "specialty mental health" service sector, with many of these obstacles (e.g., poor knowledge of mental health, stigma, long waiting lists, insurance problems, stress, and competing demands) seeming insurmountable. Indeed, some studies document that the modal number of specialty mental health visits for youth and families is only one visit (McKay, Lynn, & Bannon, 2005).

Second, while youth spend a large percentage of their time in school, and schools have been referred to as the "defacto" mental health system for children and adolescents (Burns et al., 1995), schools generally are very under-resourced to promote health wellness and address emotional/behavioral challenges in students (Weist, Paternite, Wheatley-Rowe, & Gall, 2010). For example, ratios of school-employed mental health professionals are not commensurate with what would be needed to provide quality comprehensive services, with far too many students per professional for the disciplines of school psychology, counseling, and social work. In fact, the ratio of students to professionals across all areas

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of school social work, psychology, and counseling is more than two to three times greater than the maximum ratios recommended by each single profession. Moreover, position constraints often get in the way of these staff being in roles of preventing and addressing emotional/behavioral challenges. While all three disciplines are usually trained in effective prevention and intervention, unfortunately school psychologists can be constrained into roles of "evaluators," school counselors as "academic advisors," and school social workers as "administrators and crisis responders" (see Flaherty et al., 1998; Waxman, Weist, & Benson, 1999).

Third, and based on recognition of these realities, there are considerable benefits to community mental health providers (e.g., clinical and counseling psychologists, clinical social workers, licensed professional counselors, child and adolescent psychiatrists) joining forces with schools, school-employed mental health staff, and educators to build multi-tiered programs and services to improve the school environment, promote student health and wellness, prevent and intervene early on emotional/behavioral problems, and provide intervention for students in need of more intensive services. These "expanded" SMH services involve community providers augmenting the work of school staff and ensuring access to the full continuum of programs for youth in both special and general education (Weist, 1997) and reflect a shared school, family, community-system agenda (Andis et al., 2002). Expanded SMH has been a core construct in our work, and the values of this approach are reflected throughout the first handbook (Weist, Evans, & Lever, 2003) and in the current one.

Brief History

While SMH is not in any way new, with mental health in schools discussed by John Dewey and others in the nineteenth century (see Flaherty & Osher, 2003), the approach reflected in the expanded SMH approach is relatively new, dating back to the development of school-based health centers (SBHCs) in the 1980s. SBHCs are typically served by a multidisciplinary health provider staff (e.g., nurses, physician/medical assistants, dentists, health educators, and mental health providers) who offer services including primary care for acute and chronic health conditions, substance abuse services, case management, dental health services, reproductive health care, nutrition education, health education, health promotion, and mental health services (National Assembly on School-Based Health Care [NASBHC], 2002; Strozer, Juszczak, & Ammerman, 2010). From their inception, mental health concerns have been a leading cause of student referrals to SBHCs, representing one-third to one-half of all visits (Center for Health and Health Care in Schools, 2001). Early in the development of SBHCs, for example, in seminal programs operating in Minneapolis and Dallas in the 1980s, this "flooding" of the centers with student mental health issues propelled more centers to include mental health services, as well as the growth of "stand-alone" expanded SMH programs which were much easier and less costly to develop (Flaherty et al., 1996).

Importantly, growth of awareness of student mental health needs and early examples of mental health services offered through SBHCs promoted significant involvement of the federal Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration (HRSA) in funding and guiding an initiative related to mental health in schools. In 1995, the *Mental Health of School-Age Children and Youth Initiative* was implemented by MCHB's Office of Adolescent Health. The Initiative prioritized the development of infrastructure, technical assistance, and resources to build capacity for school-based and school-linked mental health programs for students. Two national training and technical assistance centers were funded: the Center for School Mental Health (CSMH) at the University of Maryland School of Medicine and the Center for Mental Health in Schools at the University of California, Los Angeles. In addition, the grant funded five state infrastructure grants to Kentucky, Maine, Minnesota, New Mexico, and South Carolina in order to promote state support and advancement of school mental health services and programming. The MCHB investment proved foundational in raising awareness, building

infrastructure, conducting training, developing and sharing resources, and promoting collaboration to develop the field of SMH.

Beginning in the early 2000s, the University of Maryland CSMH began collaborating with the IDEA Partnership, a federal investment of the Office of Special Education Programs (OSEP) of the US Department of Education to increase learning supports for students in schools and led by the National Association of State Directors of Special Education (NASDSE). The focus of the collaboration was on developing a National Community of Practice (CoP) on Collaborative School Behavioral Health[1], based on the recognition of SMH leaders at the time that systematic agendas (e.g., building high-quality evidence-based mental health promotion in schools) rested upon the foundation of relationships. In CoPs, groups of people who share concerns, problems, and/or interest in particular topics deepen their own knowledge base and effectiveness by interacting on a regular basis with others who have similar priorities (Wenger & Snyder, 2000) and focus on providing the support for effective convening and communication to move people from discussion to dialogue to collaboration and active policy change for the topic at hand (Cashman, Linehan, & Rosser, 2007).

The National CoP started formally in Dallas, Texas, in October of 2004 at a meeting sponsored jointly by the CSMH and the IDEA Partnership. A common theme was building a *shared agenda* for SMH, with local, state, and national efforts being genuinely guided by collaborative partnerships involving schools, families, and other youth serving community systems and agencies (Andis et al., 2002). The CoP unites federal partners, states, organizations, technical assistance, and resource centers with student and family consumers, frontline school-based staff, and policymakers to address intersecting education and mental health priorities to reduce barriers to learning and improve success for all students. There are currently 55 organizations, 12 practice groups (e.g., Quality and Evidence-Based Practice, Military Families, Families in Partnership with Schools and Communities), and 17 states within the CoP. An additional emphasis of the CoP is on promoting "multi-scale" learning among schools, districts, counties, states, national organizations, and federal agencies, in sharing information and providing mutual support to escalate the pace of positive change for the field.

A number of books and journals have greatly influenced and informed the field of school mental health. For example, the first edition of the *Handbook of School Mental Health: Advancing Practice and Research* (Weist et al., 2003; Springer, New York) captured the diverse and unique components of comprehensive mental health problems in schools within our nation. A number of the chapters in the book cite the term "expanded school mental health," referring to programs that represent partnerships between schools and community organization (Weist, 1997). All chapters reflect an integrated approach, wherein staff is coming together within schools in interdisciplinary efforts that prioritize health-promoting and preventive efforts, while connecting to other programs and services in the community. This book contains five sections. The first section, *Background, Policy, and Advocacy,* includes five chapters that review history and issues related to advancing policy, advocacy, research, and financing agendas. The second section, *Enhancing Collaborative Approaches,* includes chapters reflecting connections being made in SMH at the federal level, between various professional disciplines, between schools and communities, and with families and other stakeholders. The third section, *School Mental Health in Context,* presents the experiences of programs operating in distinctive settings and developing programs for students with distinctive needs. The fourth section, *Moving Toward Best Practice,* focuses on principles for best practice, developing training programs, initiating quality assessment and improvement, focusing on student strengths, and implementing evidence-based programs for specific problems faced by youth. The final

[1]Please note that some in the field prefer the term "school mental health" and others prefer "school behavioral health." Numerous discussions sponsored by CSMH have sought to reach consensus on the use of one term, and the clear conclusion is that this will not happen, hence acceptance of multiple terms used to describe the work.

section, *Cross-Cutting Issues*, discusses unique opportunities and challenges in the field in preventing and responding to crises, programming for generalization, focusing on cultural competence, and negotiating unique legal and ethical issues.

Another significant publication for the field was the first volume of *Advancing School Mental Health Services* (Robinson, 2004; Civic Research Institute, New York), which documented the extensive challenges that youth in our nation were facing as we were entering the new millennium, including drug use, domestic violence, gangs, and suicide, and provided a showcase of best practices that illustrated possible solutions to help children face these challenges. The book opens with a historical overview of the early development of SMH and a description of frameworks for funding, implementation, and managing ethical issues. The book also contains sections on family-engaged services, critical issues involved in program evaluation and outcome assessment unique to SMH programs, and model programs that demonstrate the above-described concepts in action.

A subsequent publication, entitled *Advancing School Mental Health Services, Volume 2* (Evans, Weist, & Serpell, 2007; Civic Research Institute, New York), aimed to present the latest literature by organizing chapters that reflect key themes in advancing SMH promotion and intervention. Chapters covered key realms in practical programming and intervention strategies including in-depth overview of the following: key components in successful school-based service delivery; evidence-based clinical services; funding sources and strategies; how to build effective, collaborative interagency relationships; solutions to the barriers of misunderstanding and stigma; and effective family interventions. The first section, *Strategies for Promoting Best Practices*, includes six chapters that review strategies for bridging the science and practice gap and emphasize quality and SMH. The second section, *Prevention and Mental Health Promotion*, focuses on school-wide frameworks and approaches to SMH as well as mental health consultation in schools. The third section, *Evidence-Based, Problem-Focused Treatment*, presents programs operating with students with distinctive mental health needs. The fourth section, *Key Issues in School-Based Mental Health*, discusses unique challenges to SMH including cultural competency, maintaining fidelity, international organizations, and teacher engagement. The fifth and final section, *Future Directions*, provides emphasis toward future work in SMH to meet the challenges and realize the potential for growth.

As these books were being developed and published, leaders in SMH also noted the lack of professional journals reflecting the interdisciplinary nature of the field, with all journals at that time focused on mental health in schools being discipline specific (e.g., for school psychology, counseling, or social work). This recognition created impetus for the development of *Advances in School Mental Health Promotion* (Editor, Mark Weist), an international journal sponsored by the Clifford Beers Foundation (focused on global mental health promotion) and the University of Maryland School of Medicine. *Advances* is presented as "essential reading for those with a clinical, professional, academic, or personal interest in promoting mental health in schools, and serves to emphasize the interconnectedness of research, policy, training, and practice, as well as opportunities to make progress in all of these areas through global dialogue, collaboration, and action" (from the journal cover, Clifford Beers Foundation, 2012). The inaugural issue of *Advances* was published in 2007. Since then, articles have been published quarterly and include contributions from more than 30 nations, reflecting research and developments in the field emphasizing promotion, prevention, and early intervention strategies. In 2012, Routledge of the Taylor and Francis Publishing Group (Abingdon, United Kingdom) began publishing the journal, assisting in raising its visibility and impact.

In March of 2009, Springer published the first volume of the peer-reviewed journal *School Mental Health* (Editor, Steve Evans), a multidisciplinary journal that publishes (Springer, New York) empirical studies, theoretical papers, and review articles related to prevention, education, and treatment practices that target the emotional and behavioral health of children in the education system. The articles that have been published in

the first three volumes of this journal reflect the current cutting edge issues in the field of SMH. For example, special issues have been organized on the themes of (a) family, school, and community partnerships, (b) new paradigms and tools for assessing intervention integrity in school-based interventions, and (c) developments in school-based interventions that address domain-specific impairments across the developmental continuum for youth with ADHD. In addition, readers of the journal will find articles that examine issues affecting implementation of interventions under typical school conditions (e.g., barriers, facilitators, acceptability, feasibility, teacher preparation) and outcomes documenting preliminary effectiveness of former clinic-based interventions that have been modified for school conditions by incorporating feedback from school-based stakeholders, families, and youth, as well as articles about the costs of childhood mental health problems and school mental health programs and impact of a host of issues on future policy development.

Our goal is for this second edition of the *Handbook of School Mental Health* to build from this literature to provide updates on progress in the field and to underscore key themes in advancing training, practice, research, and policy and to promote interconnections across these realms. A brief review of prominent key themes is presented below.

Cross Cutting Themes

Acknowledging there are many key themes in need of systematic attention for the field to advance, here we focus on eight that in our experience have been a significant focus of work and are foundational to progress: (1) multi-tiered systems of support, (2) training and workforce development, (3) interdisciplinary collaboration, (4) systematic quality assessment and improvement, (5) cultural competence, (6) family and youth engagement and empowerment, (7) evidence-based practices, and (8) implementation support and coaching. We orient the reader to each of these below and conclude with comments on further building policy support for the field.

1. Multi-tiered Systems of Support

A dominant framework in the field of SMH is multi-tiered systems of support, which draws heavily on public health and prevention science perspectives and concepts. The public health framework (Mrazek & Haggerty, 1994; O'Connell, Boat, & Warner, 2009) outlines three tiers of preventive supports which represent a continuum in terms of both target population and program intensity (Mrazek & Haggerty, 1994; O'Connell et al., 2009; Walker et al., 1996). Specifically, applying this tiered approach to schools, the Tier 1, or universal (primary) level of support, is aimed at all students, anticipating that some students (e.g., 20 %) may not be responsive to this level of prevention programming. These nonresponders may require more intensive supports and interventions, such as Tier 2 (i.e., selective), targeted systems of support, which address the needs of students at risk of developing behavior or mental health concerns. These types of prevention programs often take the form of group interventions and may be used in conjunction with screening processes to identify the students in need of these types of targeted preventive supports. It is likely that a relatively small group of students (e.g., 10–15 %) will require these types of supports, and these supports are typically provided in the general education context. The most intensive preventive supports are provided through Tier 3 interventions (i.e., indicated) and are aimed at students (i.e., 5 %) who are displaying early signs of behavioral and/or mental health problems. These more intensive interventions are typically individualized and may involve parent participation in the services. The one-tiered model often used in school settings is Response to Intervention (RtI), which has largely been used to address academic problems (Fuchs, Mock, Morgan, & Young, 2003), but has also been used to address behavior concerns (Hawken, Vincent, & Schumann, 2008),

Another multi-tiered system of support that is increasingly used in schools across the USA is Positive Behavioral Interventions and Supports (PBIS; Sugai & Horner, 2006; Walker et al., 1996). The universal elements of the tiered PBIS model are the most commonly implemented

aspect of the framework. Specifically, PBIS is a non-curricular prevention model which draws upon behavioral, social learning, and organizational principles (Sugai & Horner, 2006). The model aims to alter the entire school environment (i.e., classroom and nonclassroom contexts) by creating improved systems (e.g., discipline, reinforcement, and data management) and procedures (e.g., office referral, reinforcement, training, and leadership) that promote positive change in staff and student behaviors. The whole-school PBIS strategy aims to prevent disruptive behavior and enhance the school's organizational climate by implementing a three-tiered prevention model, where selective interventions complement the universal school-wide components of the model (Sugai & Horner, 2006, 2009, 2010; Walker et al., 1996).

There is a growing evidence base for the effectiveness of the universal element of PBIS (Horner, Sugai, & Anderson, 2010). Two recent randomized controlled trials of Tier 1 PBIS in elementary schools provided evidence of its effectiveness in reducing student office discipline referrals, suspensions, and behavior problems; increasing prosocial behavior and emotion regulation; and improving school climate (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Bradshaw, Koth, Thornton, & Leaf, 2009; Bradshaw, Mitchell, O'Brennan, & Leaf, 2010; Bradshaw, Waasdorp, & Leaf, 2012; Horner et al., 2009; Waasdorp, Bradshaw, & Leaf, 2012). A recent randomized trial of PBIS at the Tier 2 level also suggested positive impacts for staff and students, including improved academic performance and reduced special education services (Bradshaw, Pas, Goldweber, Rosenberg, & Leaf, 2012).

2. Training and Workforce Development

According to a report by the Annapolis Coalition on the Behavioral Health Workforce (2007), the mental health workforce in the United States is challenged by a lack of necessary training and implementation support related to mental health prevention and promotional activities, evidence-based practice, and interdisciplinary collaboration– all essential components within the delivery of school-based services. In addition, providers in schools, particularly providers from hospital, university, and community programs, may lack formal training in how to collaborate and deliver services effectively *in schools*. It is critical that the mental health workforce develops the skills needed to effectively integrate evidence-based interventions into school settings and learn how to effectively collaborate with school stakeholders to advance a shared family-school-community mental health agenda. While there are workforce issues at the preservice and in-service levels for mental health providers in schools (see chapters led by Lever and Michael in this handbook), there are also training and workforce issues for educators related to their often limited training in children's development, mental health, and behavioral strategies to address mental health concerns in students. Without adequate focus on educator and mental health provider training related to mental health needs of students and the effective delivery of services in schools, student outcomes, as well as clinician and teacher wellness, will be negatively impacted. Recognizing this need, the Mental Health Education Consortium was founded in 2002 and is seeking to broadly improve pre- and in-service training for educators on mental health, for mental health staff to work more effectively in schools, and for all disciplines working in schools to work more collaboratively and effectively together (Anderson-Butcher & Weist, 2011).

3. Interdisciplinary Collaboration

When working in schools, it is critical to be able to work across education and mental health systems to address barriers to learning and promote student success. As reviewed earlier, a key theme is having a *shared agenda* that is respectful of and recognizes the talents of all professionals within a school building (Andis et al., 2002). For example, it is important to recognize that educators are at the frontline of being able to identify student strengths and challenges in the classroom and are in a position to implement

behavioral strategies. While it is easy to set up a team, it is more challenging to set up a structure, process, and training for successful partnership across disciplines. According to the Carnegie Foundation for the Advancement of Teaching Conference Summary (2010, p. 5), "currently, teamwork is not a primary focus of most health professions education programs around the country. Regardless of the health profession – medicine, nursing, pharmacy, social work, dentistry, etc. – students are taught to function independently and usually learn in silos." Within a school setting, there are diverse professions represented including, among others, general and special education, school counseling, school psychology, school social work, nursing, and speech and occupational therapy. While schools reflect these multiple disciplines, working together and ideally being guided by youth, families, and school and community stakeholders, rarely are staff trained or coached to be effective in this interdisciplinary context (Mellin & Weist, 2011), another area of the field in critical need of further development (see Carnegie Foundation, 2010).

4. Systematic Quality Assessment and Improvement

In volume two of *Advancing School Mental Health Services* (Evans et al., 2007), the agenda around improving quality was presented to involve the following:

> Quality is a central or overarching construct to the advancement of SMH, including many concepts such as needs assessment, resource mapping and planning; inclusive and genuine stakeholder involvement; selecting, training, coaching and supporting staff; promoting the effectiveness of coordinating teams; delivering a full continuum of empirically supported services; evaluating the impact of these services; using evaluation findings toward continuous program improvement; and influencing policies and enhancing resources. An iterative and evolving process should occur so that this loop leads to the improvement and expansion of SMH initiatives; which in turn proceed through the above steps, and influence policies and resources on a broader scale. (Weist et al., 2007, p. 4:1)

A key theme in SMH quality is assuring that mental health staff is working effectively in schools. Ideally in the interdisciplinary SMH field, mental health staff employed by the school and those employed by other community agencies will be working closely together, and this requires relationship development, sharing of information, and purposeful efforts to reach out and collaborate (see Stephan, Davis, Callan Burke, & Weist, 2006). School-employed mental health staff often benefit from training in resources available in the community, and more intensive evidence-based intervention, and community-employed mental health staff often benefit from training in local school culture, federal laws regarding special education and sharing of information (e.g., Federal Education Rights Privacy Act [FERPA]), and particular district and school building level policies (see Paternite, Weist, Axelrod, Anderson-Butcher, & Weston, 2006; Rappaport, Osher, Garrison, Anderson-Ketchmark, & Dwyer, 2003). Further, staff without experience working in schools should be prepared for differences in this environment that can be stark as compared to traditional child and adolescent mental health settings. For example, the work in schools involves much less administrative support, greater pressure to be out of the office and in other settings (e.g., classrooms, hallways, school events), and involves more prevention and early intervention than more traditional community mental health settings (see Power et al., 2003; Weist et al., 2007). There are also many specific strategies associated with quality services, such as providing training to education staff, assuring referral processes are working effectively and rapidly, promoting meaningful family and student engagement in services, and sharing findings from focused evaluations with education staff.

Each of the above dimensions and strategies for effective work in SMH should ideally be monitored and trigger quality assessment and improvement (QAI) planning as indicated. Toward this end, we (MW, NL) have developed an expanded version of an SMH report card – the School Mental Health Quality Assessment Questionnaire (SMHQAQ; Weist et al., 2005;

Weist, Ambrose, & Lewis, 2006). The SMHQAQ is designed to be used by inclusive and well-functioning school teams (a major quality indicator) at regular junctures to monitor overall progress and to make adjustments to promote improvement for particular areas of functioning, based on 10 principles and 40 indicators of high-quality service. The SMHQAQ is a unique instrument in that it uses clinician self-report data to assess SMH quality and guides clinicians in directed improvement. Research on strategies to promote a consistent focus on QAI processes by SMH staff remains a priority in the SMH field.

5. Cultural Competence

When defining culture, it is important to recognize that culture must be conceptualized broadly to include race, ethnicity, gender, age, socioeconomic status, location (e.g., urban, rural), community (e.g., military, school building), and professional discipline (e.g., special education, community mental health). Thus, to be culturally competent, SMH providers and researchers must be knowledgeable of and sensitive to these diverse cultures and contexts. However, it is important to remember that whenever a section of the population is being defined (e.g., based on race, location, or community), there are often as many within-group differences as between-group differences. Thus, to be culturally competent, providers and researchers must take responsibility for obtaining accurate information about the culture (beyond labels and stereotypes) and for exploring (rather than assuming) the extent to which the characteristics of that culture are relevant and meaningful to the client or group being served (Owens, Watabe, & Michael, 2013). Chapters within this handbook highlight the importance of cultural sensitivity in the context of (a) engaging youth and families in education and behavioral health programming for their child; (b) screening, assessing, and communicating about children's mental health problems; (c) adapting former clinic-based services to school-based approaches by incorporating feedback from school staff and families; and (d) implementing treatments with families of diverse backgrounds. In addition to the current handbook, readers are encouraged to utilize the *Handbook of Culturally Responsive School Mental Health: Advancing Research, Training, Practice, and Policy* (Clauss-Ehlers, Serpell, & Weist, 2013; Springer, New York) for more specific guidance on enhancing cultural competence in SMH.

6. Family and Youth Engagement and Empowerment

As has been acknowledged in the delineation of principles of best practice in SMH (Weist et al., 2005), family and youth partnership are fundamental to successful programs (Principle 4: *Students, families, teachers, and other important groups are actively involved in the program's development, oversight, evaluation, and continuous improvement*). With respect to SMH, the extent to which families are actively engaged in the development, implementation, and evaluation of programs and services predicts service quality and clinical outcome and is associated with better adjustment and improved academic outcomes for youth (Coalition for Psychology in the Schools and Education, 2006). School mental health programs are uniquely positioned to build partnerships with schools and families (Barrett, Eber, & Weist, 2012) while promoting a school-family-community partnership model, as opposed to a "walled model" that relies solely on the school to develop and implement all mental health-related activities. This handbook emphasizes the importance of family and youth partnerships in SMH, considers how to effectively partner with schools and communities around SMH, and offers insight into the power and potential of families when given a voice in their children's care.

7. Evidence-Based Practices

Evidence-based practice (EBP) has been defined as an approach to care provision in which the provider considers and synthesizes empirical evidence, clinical expertise, and patient values and preferences (Society for Clinical Child and

Adolescent Psychology). The publication of this handbook marks an extraordinary time in the history of evidence-based practice in the field of SMH. Namely, over the last 50 years, prevention and intervention programs and strategies for youth have been developed and tested under tightly controlled laboratory conditions (see Weisz, Sandler, Durlak, & Anton, 2005 for review). Further, the last decade has witnessed an increase in the transportation and examination of these programs and strategies when integrated into the school environment. The field is witnessing an increased emphasis on EBP across (a) the span of school-age development (preschool through high school), (b) a wide variety of providers (school-employed school counselors, social workers, and psychologists; school nurses and health providers; community-based mental health providers; educators), (c) a broad assortment of childhood problems (anxiety, depression/suicide, developmental disorders, aggression/behavioral disorders), and (d) the spectrum of service provision (promotion, prevention, assessment, selected and targeted individual and group-based treatments). Chapters in this handbook document the state of the science as the focus of research shifts from efficacy to effectiveness and dissemination. Although the science of effectiveness in SMH is in its infancy, the lessons learned that propel the next generation of research are articulated within many of the chapters. Themes that collectively emerge across chapters include issues related to feasibility of the services when implemented by school-employed or community practitioners; acceptability of the services for caregivers, students, and educators; the need for quality training and ongoing practice supports to maintain integrity of EBPs; and cost analyses. Other important themes include university-community partnerships that work collaboratively to narrow the science-to-practice gap, relevancy of the documented outcomes to educators, the importance of service marketing to obtain buy-in and adoption from school administrators, and iterative service development processes that incorporate feedback from key stakeholders into updated and modified versions of the services. These are exciting developments that breed ample opportunities for researchers, practitioners, families, and preservice graduate students to come together to address significant needs within the school community, while simultaneously advancing science that is grounded in the realities of the school setting.

8. Implementation Support and Coaching

There is increasing interest in the supports necessary to help implement EBPs in schools (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005; Domitrovich et al., 2008). While there has been a long history of providing implementation support to program implementers (e.g., teachers, clinicians), which often takes the form of coaching and consultation, only recently has there been a concerted effort to try to formalize the implementation support process. The field of implementation science more generally is concerned with identifying the supports necessary to promote successful and high-quality implementation of evidence-based program in "real-world" settings, such as schools (Fixsen et al., 2005). There is also an interest in trying to document which aspects of the support system are critical to high-quality implementation, such as training, technical assistance, and coaching, and, in turn, the association between implementation support and outcome for students and/or staff (Domitrovich et al., 2008). There has been a particular focus on coaching as a specific form of implementation support. As outlined in Pas, Bradshaw, & Cash (2013), there is a growing body of research aiming to document such an association; however, some of the empirical research to date has been mixed, with some studies reporting significant impacts on implementation quality and relatively few studies documenting the link with improved outcomes for students. While there is interest in coaching as a potentially promising conduit for the promotion of high-quality implementation of evidence-based practices in schools, be they programs implemented by teachers or clinicians, there is a need for more empirical research documenting the

critical features of coaching (Hershfeldt, Pell, Sechrest, Pas, & Bradshaw, 2012), identifying what types of coaching models are most effective for different types of programs or conditions of implementation (Denton & Hasbrouck, 2009) and what contextual factors influence the success of various coaching and other types of implementation supports (Domitrovich et al., 2008; Han & Weiss, 2005).

Policy Support for the Field

Each of the above elements (i.e., using a multi-tiered framework, growing an effective and interdisciplinary workforce, that is guided by systematic QAI processes, emphasizing cultural competence, family and youth engagement and empowerment, and implementing evidence-based practices supported by the right forms and amounts of implementation support) together contribute to the achievement of valued school and student outcomes. In turn, the achievement of these outcomes will support federal, state, and local policy support and grassroots support (e.g., spread across schools as principals become "sold") for the field to gain momentum and capacity. An inherent paradox is that currently capacity for effective promotion, prevention, early intervention, or treatment in schools is often poor, resulting in implementation of random, superficial, and crisis-oriented services that typically do not contribute to positive outcomes. Hence, a critical need to improve and expand SMH (a specific goal of the President's New Freedom Commission on Mental Health, 2003) is to move toward more widespread implementation of local strategies inclusive of the eight themes reviewed above. These eight themes are found throughout this book.

Organization and Contents of This Handbook

The book opens with important commentaries from leaders in the field, Lucille Eber, Hill Walker, Kathy Short, Abe Wandersman, and Deborah Hamm, who amplify these eight themes while underscoring other critical directions for the advancement of SMH. There are then six sections that logically proceed in step with the multi-tiered framework, first reviewing foundational factors and moving up from more preventive strategies to interventions for specific problems.

Section 1: Foundations: Funding, Training, and Interdisciplinary Collaboration

This section includes six chapters, reviewing (a) an array of funding strategies, (b) competencies for interdisciplinary and cross-system collaboration, (c) specific recommendations and examples for preservice education, (d) strategies for effective teams, (e) a partnership model that integrates research and practice, and (f) strategies for assuring least restrictive environment for youth presenting challenging emotional/behavioral problems.

Section 2: Prevention and Mental Health Promotion

This section includes six chapters, on (a) integrating Positive Behavioral Interventions and Supports (PBIS) and Social and Emotional Learning (SEL), (b) developing early childhood programs for low-income youth, (c) primary and secondary prevention programs for at-risk youth, (d) preventing depression, (e) connecting after-school programs and SMH, and (f) preventing relational aggression.

Section 3: Youth and Family Engagement and Empowerment

This section includes five chapters reviewing (a) strategies for youth involvement including student recommendations, (b) strengthening components of family involvement, (c) methods for partnering with families, (d) increasing parental engagement, and (e) an ecological approach to family intervention.

Section 4: Coaching and Consultation

This section includes three chapters on (a) coaching classroom-based preventative interventions, (b) supporting teachers through consultation and training, and (c) models of psychiatric consultation to schools.

Section 5: Screening and Early Identification

This section includes three chapters reviewing: (a) early detection of problems through screening, (b) culturally competent screening for emotional and behavioral problems, and (c) early identification of students with psychosis.

Section 6: Intervention for Specific Problems/Challenges

This final section of the book includes eight chapters focused on (a) strategies to reduce bullying, (b) transportable treatments for anxiety, (c) treating depression in students, (d) organizational interventions for youth with ADHD, (e) integrating an evidence-based classroom intervention for youth with ADHD into a three-tiered system of behavioral supports, (f) a comprehensive, life-course model for treating emotional and behavioral problems in youth, (g) classroom intervention for youth pervasive developmental and autism spectrum disorders, and (h) supporting the mental health needs of military-connected students.

Conclusion

At the time of this writing, in the beginning of 2013, the aftereffects of the horrific school shooting in Newtown, Connecticut, in December 2012 are still cogently felt by the nation, and we hope that this book honors the victims, survivors, and heroes involved in this event. In response to the shooting, a group of nine leading scholars and researchers on effective schools, school violence, positive behavior support, and/or school mental health developed a widely circulated position statement endorsed by hundreds of organizations and leaders from these and other fields. While acknowledging the need for policy enhancement related to assault weapons access, the position statement emphasized the need for approaches characterized by four pillars: balance, communication, connectedness, and support (Interdisciplinary Group on Preventing School and Community Violence, 2012). Summarizing, avoiding reactionary and likely ineffective approaches (e.g., widespread use of metal detectors), increasing communication and relationships among students and school staff to increase the likelihood of identification and assistance to those at risk for committing school violence, and supporting and assisting students struggling with emotional and behavioral challenges, early on and effectively. Since the events and the publication of this position statement, there has been much local, state, and national discussion on the importance of SMH in assuring student and staff safety and in promoting the health and academic success of the nation's children and adolescents (see United States' White House, 2013). Indeed, it is our hope that this book spurs efforts to improve training, practice, research, and policy and promote interconnections across these realms in this critically needed and important field, helping to increase effective services in more schools, assisting more students and families, and enhancing the overall health of the nation.

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Part I

Foundations: Funding, Training, and Interdisciplinary Collaboration

Funding Expanded School Mental Health Programs

Nicole L. Cammack, Nicole Evangelista Brandt, Eric Slade, Nancy A. Lever, and Sharon Stephan

Mental health services for students across the developmental spectrum are often limited and difficult to access (National Scientific Council on the Developing Child, 2008). For example, about 70 % of school-aged children and adolescents with a mental health disorder do not receive treatment (Greenberg et al., 2003). Because education in the USA is an entitlement for all children, schools have been identified by the federal government as a natural setting and best site to provide mental health treatment and prevention services due to the large number of children and adolescents who can be reached in a school location (Anglin, 2003). In recognition of the value of providing services directly where students are, over the past 20 years, policies and programs that integrate mental health services into schools have flourished, and research continues to demonstrate their positive impacts on educational and mental health outcomes of students. The Surgeon General's report on Children's Mental Health (US Department of Health and Human Services, 2000) and the President's New Freedom Commission on Mental Health (New Freedom Commission on Mental Health, 2003) while identifying schools as a major setting for providing mental healthcare utilization children and adolescents did not address funding issues related to how to finance these recommended services. Developing and sustaining funding streams to support the delivery of school mental health services and prevention programs continues to be an obstacle at local, state, and national levels (Evans et al., 2003).

In order to meet the needs of all youth, it is critical to identify funding of mental healthcare in natural settings (i.e., schools) (Kazak et al., 2010). Expanded school mental health (ESMH) programs have been successful in overcoming logistical barriers to care and decreasing the stigma of mental help seeking, which has resulted in dramatic improvements in access to care to youth who may not otherwise receive those services (Bringewatt, & Gershoff, 2010; Weist, Evans, & Lever, 2003). Specifically, through partnerships between schools and community agencies, hospitals, and universities, ESMH programs have increased the types of mental health services available in schools, by providing a full array of mental health promotion and intervention services to youth in both general and special education classes. Comprehensive mental health services such as assessment, therapy (e.g., individual, family, and group), staff consultation, and prevention activities add to the services provided

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by other school-hired mental health professionals (e.g., school psychologists) and increase schools' capacities to provide treatment of mental health problems and prevention programs (Flaherty, Weist, & Warner, 1996; Flaherty & Weist, 1999; Weist, 1997). However, despite this widely documented need for mental healthcare provided within schools and the benefits of ESMH programs, funding to provide these services continues to be a struggle for many programs. For example, financial support for ESMH services has not increased at a rate that is consistent with the need for these services. Specifically, a 2002–2003 Substance Abuse and Mental Health Services Administration report on school mental health revealed that 69 % of school districts across the USA reported an increase in student need for mental health services during the prior 2 years, but only 15 % of schools reported an increase in their funding budgets for school mental health services (Foster et al., 2005).

Expanded school mental health programs face a challenging funding environment due to persistent budgetary deficits at the local, state, and national levels. Additionally, funding opportunities change and evolve over time, and the differences between local, state, and national budgets and specifications of how awarded funds can be utilized further complicate funding of ESMH programs. This chapter will identify barriers to funding ESMH programs in schools, summarize funding strategies to support ESMH programs, and review the differences in funding opportunities of ESMH programs at the local, state, and national levels. We build on prior overviews of school mental health funding (see Kutash, Duchnowski, & Lynn, 2006; Poirier & Osher, 2006; Price & Lear, 2008; Weist, Goldstein et al., 2003), discuss cost analyses of ESMH, and consider ESMH funding within the context of healthcare reform and economic analyses.

Common ESMH Funding Mechanisms

In order to sustain the delivery of mental health services, it has become incumbent upon ESMH programs to secure funding from multiple sources. Mental health support services for students are primarily funded through public sources (i.e., federal government), insurance companies, managed care companies, charitable groups, and foundations (Poirier & Osher, 2006). Although some potential funding sources may be underutilized (e.g., from EPSDT, Safe and Drug-Free Schools, Title I), the most frequently utilized sources of funding (e.g., Medicaid fee-for-service) are difficult to obtain and may not provide sufficient revenue to cover the costs associated with ESMH programs (Center for Health and Health Care in Schools, 2003; Evans et al., 2003). In addition, funding provided by education systems is usually limited, and when community mental health mechanisms are used, challenges are presented on how to provide services to students without Medicaid (Lever, Stephen, Axelrod, & Weist, 2004; Mills et al., 2006). To help ESMH programs secure funding to sustain mental health services in schools, this chapter will detail and provide examples of common categories of funding including federal funding, state and local funding, solicited funding, blended funding, and braided funding that are common mechanisms for funding ESMH programs.

Federal Funding

Federal funding sources have defined regulations to mandate how funds may or may not be used by ESMH programs (Freeman, 2011). Federal and state funding are traditionally designed to pay for treatment services of diagnosable mental health disorders and are not intended to fund mental health prevention or promotion activities. Prevention and promotion activities are more commonly supported through grant dollars and require ongoing advocacy to maintain. Federal grants can be allocated in four ways: (1) block grants, (2) project grants, (3) legislative earmarks, and (4) direct payments to provide states with a portion of funding needed to support ESMH programs in the schools (Kutash et al., 2006; Poirier & Osher, 2006). Specifically, *block grants* use a formula to provide a fixed amount of funding (based on population, unemployment

levels, and other demographic characteristics), which is provided to states. A state then determines the appropriate use of those funds and allocates them within the state. The Community Mental Health Services Block Grants is example of a block grant that supports activities that improve the quality of mental health services through the use of evidence-based practices, quality improvement, and good consumer outcomes (Poirier & Osher, 2006). *Project grants* (also known as discretionary grants) are awarded through a competitive process and are intended to fund specific projects or services over a fixed period of time. Next, *legislative earmarks* are awarded noncompetitively and specify how funding should be allocated within a larger program. It is important to note that legislative earmarks only provide funding over one fiscal year and do not continue over multiple fiscal years. Public or private agencies are eligible for either "hard" earmarks which are written into legislation and specify recipients and the amount of funding or "soft" earmarks which are awarded based on conference reports. Lastly, *direct payments* are a form of federal assistance provided directly to individuals who meet eligibility requirements (e.g., Medicaid) (Poirier & Osher, 2006).

Under federal regulations (Centers for Medicare and Medicaid Services, 1997), schools that bill Medicaid for services cannot provide students in regular education programs and non-Medicaid-eligible students the same services, unless a sliding scale fee and the capacity to bill private insurance plans are also implemented. Three specific financing strategies that can be utilized to maximize Medicaid to support mental health services for students include fee-for-service claiming (i.e., Medicaid-eligible services are reimbursed by the state Medicaid agency), administrative claiming (i.e., claiming federal reimbursement for the costs of Medicaid administrative activities, such as assisting with Medicaid enrollment, performed in the school setting), and leverage (i.e., two or more agencies partner to commit funding contingent upon committed funding from the other parties). ESMH programs can be viewed as providers of primary care and preventative services and therefore can utilize patient care reimbursements (Evans et al., 2003). However, critical components of successful ESMH programs (e.g., teacher consults, classroom observations, parent management) are not reimbursable through fee-for-service claims.

Other common sources of federal funding that ESMH programs may utilize include the Department of Education, Department of Health and Human Services, Office of Juvenile Justice and Delinquency, IDEA (Individuals with Disabilities Education Act) which was reported as the national top federal source of funding for school mental health intervention (Anglin, 2003; Foster et al., 2005), Title I (Elementary and Secondary Education Act of 1965), Title IV (Safe and Drug-Free Schools and Communities program), Title V Maternal and Child Health Block Grant, Title XI funds for disadvantaged youth, Title XX Social Services Block Grant, and the Preventive Health and Health Services Block Grant.

State and Local Funding

On average, almost half of all public and secondary school revenues come from state sources. In fact, some states include school-based health and mental health services in their budgets (Weist, Goldstein et al., 2003). The Children's Health Insurance Program (CHIP) is an example of a state-driven, federally funded initiative designed to provide insurance coverage for children from low-income families who do not meet eligibility for Medicaid coverage (Weist et al., 2003). In some states, this program operates as an extension of Medicaid, with higher income limits for eligibility, increasing the population to whom services can be administered. Examples of mental health services funded by CHIP include support assessment and treatment services in schools for youth with established problems (Maag & Katsiyannis, 2010). Additionally, states can apply for waivers to customize their ESMH programs, such as the waiver for children with chronic and severe mental illness in New Jersey (State of New Jersey, 2011) and the waiver for children with serious emotional disturbances in Kansas (State of Kansas, 2012).

Recently many states have initiated grant programs as a mechanism to expand the funding stream of ESMH programs. For example, in 2007, the Minnesota Department of Human Services released a Request for Proposals totaling over $10 million to fund projects that develop the infrastructure of school-based mental health over a 3-year period (Minnesota Department of Human Services Children's Mental Health Division Request for Proposals, 2007). Under this initiative, funding was provided by the state to support programs that provide mental health interventions and treatment including parent training and consultation. In addition, applicants could request additional funds from the state grant to cover costs associated with establishing billing procedures, developing partnerships with school personnel, providing staff development in mental health and social-emotional learning, and building outreach activities and referral networks.

At the local level, school districts have the power to determine what mental health services are funded and can allocate funds toward programs that treat mental health disorders within the school setting. Local revenue funds are typically limited because they are intended to support basic school components. Bershad and Blaber (2011) note, however, that local funding may be more easily accessed if funders are provided with evidence of the association between student mental health and academic outcomes. School district revenues can either be general revenue (i.e., for any educational purpose) or categorical revenue (i.e., targeted for specific purposes). Categorical revenues are intended to increase educational resources for specific student populations in need of supplemental services. Because local revenues for education are typically lower in school districts with higher levels of poverty, categorical funding can be utilized as an important mechanism to fund ESMH programs to at-risk youth (Poirier & Osher, 2006).

Solicited Funds

A significant private funding source of school mental health programs is foundation support (Weist, Evans, & Lever, 2003) because they can provide supplemental and often less restrictive support (e.g., more flexibility for the provision of mental health promotion and prevention-related services) and resources to ESMH programs (Evans et al., 2003). For example, the Health Foundation of Greater Cincinnati (https://www.healthfoundation.org/) funds the implementation of mental health prevention programs in schools, and the Blue Cross/Blue Shield Foundation in South Carolina provides seed grants to help supplement school mental health clinician salaries in an effort to retain clinicians in areas with budget shortages (Freeman, 2011). However, many traditional organizations such as The Duke Endowment, (http://www.dukeendowment.org/), which in the past provided funding to support planning and start-up costs associated with school-based mental health centers, have experienced a decline in assets resulting in a limited ability to fund new grants (North Carolina School Psychology Association, 2011).

Coordinating Funding Streams

To combat the difficulties associated with securing funding and the challenge of any one source having the means to cover all financial expenses to support ESMH services, many programs seek funding from multiple funding streams. This helps ensure that programs receive adequate funding to supplement the costs associated with providing mental health services in schools and helps protect against a program being overwhelmed and needing to shut down if the funding source is cut. For example, findings from a comprehensive assessment of the New Hampshire's school mental health system suggest that the state utilizes funding from multiple sources, successfully integrates Medicaid services with IDEA-funded services, and has partnerships between the school districts and community health centers (Norton & Tappin, 2009).

Two common strategies to combine multiple funding streams are *braided funding* and *blended funding*. Braided funding involves coordinating multiple funding streams that were initially separate to pay for services provided by a given program. Under braided funding, ESMH programs

must maintain the separate budgets of each funding stream and carefully detail how funds from each stream were utilized (Bershad & Blaber, 2011; Mauery, Vaquerano, Sethi, Jee, & Chimento, 2006). This can be administratively challenging to ensure that each funding stream is only paying for activities eligible under that funding stream. ESMH programs that utilize braided funding may risk becoming "locked" into providing specific types of services on the continuum, as dictated by contract requirements (Poirier & Osher, 2006). For example, programs that rely on third-party reimbursements may have limited time to provide universal or targeted prevention services if specified by braided funding sources (Center for School Mental Health, 2003).

Blended funding involves combining funds from multiple funding streams into a single budget. ESMH programs are able to allocate funds to provide services without the need to track and report back to funders which funding stream paid for exactly which services and expenses (Mauery et al., 2006; Poirier & Osher, 2006). The benefit to blended funding is that administrative reporting may be less burdensome than in braided models, and all funders are supporting the same overarching deliverables and program goals. However, it should be noted that some funding mechanisms may not allow for the blending of funds.

Examples of Sustained Funding of ESMH Programs

Washington, DC Commission

In 1999, 17 public charter schools in Washington, DC were awarded the Safe Schools/Healthy Students Initiative grant to implement a comprehensive violence prevention initiative. Through the SS/HS Initiative grant, the Washington, DC Department of Mental Health was subcontracted to develop a school-based mental health program to implement in 16 public charter schools who were recipients of the grant (Price & Leah, 2008). An additional 18 schools were added to the grant during the 2005–2006 academic year. The DC Department of Mental Health utilized the ESMH framework (Weist, 1997) as a model to develop their school mental health program (SMHP). The SMHP provides prevention, early intervention, and treatment services through three targeted levels of care: primary prevention (universal prevention services), secondary prevention (selective prevention services), and tertiary prevention (indicated prevention services).

Since 2003, the Washington, DC Commission has successfully sustained funding for its school mental health services. The DC school mental health programs are predominantly funded by local dollars from the city government that is given to the DC Department of Mental Health and utilizes a very small percentage of their budget from fee-for-service (for treatment services) revenue. In the 2011–2012 academic year, school mental health services are being provided by the DC Commission with 43 clinicians across 13 charter schools and 41 public schools in Washington, DC. This project demonstrates the value of using federal grant dollars as a foundation to build, implement, and document the impact of a program. The documented successes with the project and the relationships formed as part of the work helped to build buy-in and needed programmatic and financial support from the local government and community when the federal grant had ended.

Boys Town South Florida

One example of how funding has been secured for social, emotional, and behavioral health services for young children and their families in schools is found in Florida. Boys Town South Florida (www.boystown.org/south-florida) implements two programs in Palm Beach County: School & Family Support Services (SFSS) and Primary Project. The SFSS program provides in-school and in-home services to children in 70 elementary schools. Primary Project is an evidence-based program developed by the Children's Institute and provides child-led play sessions in 12 elementary schools in the county. Both programs are primarily funded through local tax dollars that are collected by an independent, special taxing district, which is set up as a quasi-governmental entity. The funding organization has a local board that sets

funding priorities and oversees the distribution of funds, as well as monitors for child and system level outcomes. In addition, services provided within the SFSS program can be eligible for reimbursement under a state-authorized Medicaid carve-out plan for the at-risk population. Under this plan, the child needs to be at-risk for child abuse or neglect, as evidenced by a variety of risk factors.

Baltimore, Maryland: Expanded School Mental Health Network

Baltimore City is well recognized for its 23-year history of providing comprehensive mental health services in City Schools and its 10-year history of providing mental health services in City Head Start Centers. In 2011, the Expanded School Mental Health (ESMH) clinicians served 89 City Schools, and Early Childhood Mental Health (ECMH) clinicians served 14 Head Start Centers. The expanded school mental health network has relied on a blended funding model that has pooled and leveraged funding from multiple agencies and programs including the City Schools, Baltimore Mental Health Systems, Inc. (the local core service agency for the state mental health authority), Baltimore Substance Abuse Systems, Inc. (the substance abuse authority for Baltimore City), Baltimore City Health Department, the Family League of Baltimore (a quasi-governmental nonprofit organization that works with a range of partners to develop and implement initiatives that improve the well-being of Baltimore's children, youth, and families), and the Department of Labor. The funders for the project have worked together as part of the leadership team of ESMH to establish funding guidelines, deliverable requirements for ESMH clinicians, an online statistical reporting system, and clear expectations for principals receiving services within their schools. The ESMH network in Baltimore City demonstrates the value of leveraging dollars and the importance of defining and documenting service provision and student-level outcomes (see Weist, Paternite, Wheatley-Rowe, & Gall, 2009).

Implications of Health Reform

State and federal legislation is critical in determining the funding and coordination of integrated mental health services for children and adolescents in schools. For instance, at the state level, the Mental Health Services Act in California (also known at Proposition 63) gave the Department of Mental Health the authorization to establish guidelines and fund the implementation of prevention and early intervention activities and workforce education and training throughout the state (California Department of Mental Health, 2004). Under Title V of the District of Columbia's Public Education Reform Amendment Act of 2007, an Interagency Collaboration and Services Integration Commission was created to foster collaboration between agencies to promote social and emotional skills among children and youth. Specifically this integrated system focused on using data to identify and assess youth that receive services through various agencies in Washington, DC, provide evidence-based programs, and evaluate the results (Public Education Reform Amendment Act of 2007, 2007). As such the commission is eligible to combine local, federal, and other resources to provide multidisciplinary assessments, integrated services, and evidence-based programs to youth and receive and disburse federal, state, and local funds to provide funding to at-risk children, youth, and families (Public Education Reform Amendment Act of 2007, 2007).

At the federal level, the Patient Protection and Affordable Care Act (Affordable Care Act [ACA], 2010), also known as national healthcare reform, was signed into law by President Barack Obama in 2010. Over the course of a decade, the ACA intends to expand health and mental health services to a larger population and make health insurance coverage more affordable. Specifically, ACA increases Medicaid coverage eligibility to younger children (i.e., under age 6 living in families with incomes at or below 133 % of poverty), youth in foster care, and children with preexisting

medical conditions and provides grant funding to integrate mental health services and expand mental health prevention. ACA affords more children and adolescents access to behavioral health outreach, screening, assessment, and intervention (ACA, 2010; Children's Health Fund, 2011; Cunningham, Grimm, Evangelista, Lever, & Stephan, 2012). The ACA also preserved CHIP, which provides medical insurance coverage to children from low-income families who are not eligible for Medicaid and cannot afford health insurance. The CHIP Act of 2009 authorized funding of school-based health centers within schools to increase student access to health and mental health services. Since the ACA law passed, $95 million has been awarded to fund school-based health centers (U.S. Department of Health and Human Services, 2011). Legislation that supports the funding of grants and programs that provide ESMH services and other mental health interventions expand mental health services to vulnerable and underserved populations, further highlighting the importance of school mental health professionals working with legislators and advocating for the funding of integrated comprehensive mental health services for children and adolescents in schools.

Steps Needed to Fund School Mental Health Programs

Expanded school mental health programs continue to face numerous challenges with sustaining funding to provide mental health services, prevention and intervention efforts, and targeted services that reduce the impact of mental illnesses on child and adolescent functioning in schools. To meet this challenge and to help sustain ESMH services, programs must identify ways to enlarge their funding pool. Specifically, conducting a full comprehensive examination of existing funding opportunities at the national, state, and local levels for grants, contracts, fee-for-service payments, interagency agreements, etc., can result in identification of funding streams that were not previously utilized by ESMH programs. It is possible to pool multiple block grant funds together to support ESMH programs. For instance, the Community Mental Health Services Block Grant, Social Services Block Grant, Juvenile Accountability Block Grant, Education Block Grant, Early Childhood Block Grant, and Community Development Block Grant are examples of block grants that support early intervention mental health services provided by ESMH programs.

It is also important to analyze education funds at the national, state, and local levels to determine the availability of funding for nonacademic learning supports such as ESMH programs. For example, prior research has shown that students who receive mental health services and prevention and intervention programs through school-based services are more likely to achieve in school (Greenberg et al., 2003; Welsh et al., 2001; Zins et al., 2004), reduce special education referrals and improve school climate (Bruns et al., 2004; Substance Abuse and Mental Health Services Administration, 2005), decrease grade retention (Substance Abuse and Mental Health Services Administration), and reduce levels of emotional and behavioral difficulties (Hussey & Guo, 2003). Thus, the positive academic and emotional outcomes associated with school-based mental health services may qualify many ESMH programs for educational grants that support nonacademic learning supports. In addition, it is beneficial for ESMH programs to align goals with education priorities and explore the possibilities for direct education funding for mental health promotion and early intervention. For example, in the states of Ohio and North Carolina, federal education funds have been used to support the implementation of evidence-based programs and interventions (Price & Lear, 2008). Examples of federal educational supports include Title I (Part D: Children and Youth who are Neglected Delinquent or At-Risk), Title IV (Part A: Safe and Drug-Free Schools and Communities; Part B: Twenty-First Century Community Learning Centers), and Title V (Promoting Informed Parental Choice and Innovative Programs). In addition, the Individuals with Disabilities Education Act designates a portion of the special education budget to provide intervention services

to youth who have not qualified for special education services yet, making it possible to fund early intervention work through ESMH programs.

Expanded school mental health programs are also encouraged to develop relationships with other agencies (e.g., community mental health centers) or professionals (e.g., child psychiatrists) who can access categorical funding that many ESMH programs are not eligible to receive. Through this partnership, ESMH programs and other outpatient agencies can work together to develop and create a full continuum of integrated mental health services for students. For example, Price and Lear (2008) suggested that an ESMH program that is not eligible for Medicaid funding can develop a relationship with a Medicaid-certified provider who can bill for Medicaid services provided to Medicaid-eligible students.

Assessing Cost of ESMH Program Delivery and Establishing Cost-Effectiveness

Expanded school mental health programs have a critical role in ensuring that schools effectively reinforce positive social behaviors and provide needed mental health services to students with emotional and behavioral problems. Although, these programs also have important mental health and educational economic benefits, they generally receive little or no funding via general education revenue sources in the USA. Most economic research on education's benefits emphasizes the value of academic skills, but recent studies also recognize the economic value of positive social and emotional behaviors among students (Heckman, 1999). Behaviors that are often developed and reinforced in ESMH programs, including adaptive classroom behaviors, completing homework, and positive peer interactions, are increasingly recognized to be equally as important to later economic outcomes as are academic skills. Such behaviors tend to be associated with greater employment stability, higher earnings, and lower chances of needing public welfare supports and becoming involved in the criminal justice system. Rigorous economic evaluations, conducted in collaboration with schools, are needed to demonstrate the numerous economic benefits and positive outcomes associated with students who receive ESMH services. Consequently, it is increasingly clear that these programs' opportunities to garner sustained financial support will depend to some extent on whether their costs and benefits are well documented in evaluations.

Evaluations of the costs and benefits of ESMH programs are increasingly of interest to policymakers and organizations that provide these services. Economic assessments may be used to document the costs and the potential future economic value of ESMH programs and to inform decisions about future spending on programs and services. Given the need for such assessments, it is perhaps surprising that they are rare. In fact, few schools and ESMH programs have the infrastructure and expertise needed to carry out such evaluations (Levin, 2001). This section summarizes the basic elements of economic evaluations of ESMH programs and current obstacles to their wider use, with the aim of providing information to clinicians and administrators who may be interested in developing a capacity for economic evaluation in schools.

Cost Analyses

Several types of cost analyses are used by economists to evaluate programs. Cost (or cost-consequences) analyses provide estimates of a program's impact on resource utilization. A ***cost analysis*** provides estimates of both the direct costs of paying for a program's implementation and operation and the costs of any resources used or saved as a result of the program's implementation. For example, implementation of a school-wide prevention program results in direct costs, such as expenses for an instructor who delivers the intervention and any materials that are used. This prevention program may also result in indirect costs to teachers and school administrators, who may have to complete additional behavioral assessments of students and enter their assessment data

into a database. Some resources may be saved, for example, if the prevention program results in fewer visits by students to the principal's office. A ***cost study*** would provide an estimate of the total resource costs of a program (i.e., direct costs, indirect costs, and saved resources) regardless of whether services result in direct payments. For example, a school administrator's time may be valued using the administrator's salary plus benefits divided by total annual work hours. A cost study can consequently provide an assessment of the total resource impacts or ***opportunity costs*** of various initiatives and programs.

To carry out a comprehensive cost study, schools usually need databases that track resource use at the individual student level. Individual-level measures of service delivery costs and other related education costs are needed to assess the opportunity or resource costs of programs. However, few schools have the capacity to extract reliable information on the average costs of resources used within the school, let alone costs at the individual level. Most schools' accounting systems record aggregated costs for all students or for particular expense categories within the school (e.g., salaries, facilities, vendor services, supplies), but do not define categories in a way that allows tracking of costs for particular types of services or specific programs. One reason for this lack of capacity is that schools have not historically been required to maintain this level of information and have not had to provide regular reports on their expenditures for individuals or specific services and programs within the school. Electronic information systems that are designed to track resource costs and services at more disaggregated levels may become more prevalent in the coming years, as many schools are now required to comply with more stringent cost-reporting standards for purposes of public accountability.

Cost-Benefit Analyses

In a ***cost-benefit analysis***, all costs and benefits of a program are monetized (i.e., measured in dollars), and the costs are subtracted from the benefits to calculate the program's ***net benefit***. Costs are defined as the value of resources used, whereas ***benefits*** are defined as the value of resources gained (or saved). If a program is said to have a positive net benefits, it means that the value of the resources gained as a result of the program are thought to exceed the value of the resources used to provide the program. Consequently, programs whose net benefits are positive are considered to be worthwhile public investments.

Cost-benefit evaluations of any type of education program are rare [for reviews, see (Barnett, 1995; Karoly, 1998)]. However, a few education programs have been evaluated extensively over multi-year periods of time, even up to several decades. Of these, the High/Scope Perry Preschool program study, a study of disadvantaged African-American children enrolled in a high-quality preschool education program in the 1960s, is perhaps the longest and most extensive study (Heckman, Moon, Pinto, Savelyev, & Yavitz, 2010). The results of follow-ups through age 40 of children randomized either to High/Scope or the no intervention condition have demonstrated that the benefits of the program far exceeded its costs (Barnett, 1985, 1996; Belfield, Nores, Barnett, & Schweinhart, 2006). In the most recent of these cost-benefit analyses (Belfield et al., 2006), the estimated intervention costs were $15,166 per child and the estimated (lifetime) benefits (estimated as of age 40) were $195,261 per child, implying a net benefit of $180,455. Approximately two-thirds of these benefits (65 %) were attributable to lower costs of criminal activity, suggesting that the program's largest single benefit was improvements in adaptation to behavioral norms in adulthood.

Two other programs, the Child-Parent Center Early Education program (Reynolds, Temple, Robertson, & Mann, 2002; Reynolds, Temple, White, Ou, & Robertson, 2011) and the Carolina Abcedarian Project (Barnett & Masse, 2007) also provide evidence of substantial net economic benefits associated with high-quality early education programs. The payoffs to such cost-benefit evaluations have been substantial. The positive net benefits demonstrated by the High/Scope Perry

Preschool project and other similar demonstration projects during the period were instrumental in securing and sustaining federal Head Start and Early Head Start funding (Levin, 2001).

One of the greatest obstacles to cost-benefit evaluation of ESMH programs is the long period of time that must often elapse until the economic benefits of a program occur. Many important economic outcomes, such as employment and earnings, receipt of publicly provided income supplements and subsidies, and expenditures by other public programs on services and supports, are not observed until well into adulthood; whereas most school-related prevention and mental health intervention programs are used during childhood and adolescence. Thus, cost-benefit analyses of ESMH programs have limited potential for application, except in cases where the program being examined is expected to result in substantial near-term benefits, such as sharp reductions in expensive special education placements. This obstacle has led to other forms of economic evaluation, such as cost-effectiveness analysis, that do not require such lengthy periods of follow-up.

Cost-Effectiveness Analyses

A ***cost-effectiveness analysis*** refers to a method for comparing program and policy alternatives according to their impacts on the use of resources (i.e., their costs) relative to their effectiveness in improving outcomes (Gold, Siegel, Russell, & Weinstein, 1996). The summary measure in a cost-effectiveness analysis is a ratio of the increase in costs associated with a program divided by the resulting improvement on a standardized measure of outcome, such as improvement on a measure of academic achievement. This ratio is interpreted as the cost (in terms of resource utilization) of obtaining a unit of improvement on a chosen outcome measure. Alternatives that can be obtained at lower cost for a given improvement in outcome and alternatives that result in a greater improvement in outcome for a given cost have lower cost-effectiveness ratios and consequently are considered more "cost-effective" (i.e., a better overall value).

Cost-effectiveness analysis could be used to evaluate ESMH programs and compare the provided services' value to the value of other types of education programs. School prevention and mental health interventions in principle can reduce the frequency of problem behaviors (e.g., disruptiveness and violence, substance use, serious rules violations, school absences) in children and adolescents that tend to be associated with adverse health, social problems, and economic difficulties in later adolescence and adulthood. Consequently, programs that result in fewer behavior problems in school are likely to have future economic benefits that partially or fully offset their costs.

The cost-effectiveness evaluation of the Fast Track intervention (Foster & Jones, 2006) provides a good example of the cost-effectiveness analysis of an experimental school program aimed at reducing behavior problems. Fast Track is an intensive, multicomponent school-based intervention for elementary school-aged children, which targets the prevention of aggression in youth (McMahon et al., 1999). Intervention components are delivered in 1st through 10th grades and target multiple determinants of development including parenting, peer relations, and social-cognitive and cognitive skills. During the elementary school phase of the intervention, families are offered group-based parent training with home visitation, academic tutoring, and social skills training. In addition to group meetings, individual support is provided through peer pairing and home visitation to children and parents. Starting in 2nd grade, children are assessed for academic skills, and those whose assessments suggest unmet needs are offered individual tutoring supports. In 4th grade, participants are paired with same-gender same-race mentors. In 5th and 6th grade, monthly group sessions for parents and youth focus on the challenges of transition to middle school. Additional sessions and individualized planning were provided in subsequent years. In addition to indicated individual and group interventions, a universal classroom intervention focusing on promoting a more competent and less aggressive social ecology was implemented.

The Fast Track intervention was estimated to cost $58,283 per child (Foster & Jones, 2006).

Given the intensity, duration, and multicomponent nature of the Fast Track intervention, such a high cost is not surprising. In terms of outcomes, Foster and colleagues (2006) assigned the following dollar amounts to the value of preventing three study outcomes: $1 million for the prevention of a case of conduct disorder, $160,000 for the prevention of an index crime (e.g., armed robbery), and $50,000 for the prevention of interpersonal violence (e.g., serious assault). In contrast, Fast Track had an actual cost of $3.5 million per case of conduct disorder prevented, $423,480 per index crime prevented, and $736,010 per act of interpersonal violence prevented. Based on these numbers, Fast Track was not considered cost-effective.

Although the Fast Track intervention is not cost-effective when offered as a universal intervention, it may be cost-effective if the intervention is targeted to a group of students who are at high risk for developing later conduct problems. Program targeting, using predetermined criteria to select participants for an intervention or program, can have dramatic effects on improving cost-effectiveness. For example, as was demonstrated in the evaluation of the Fast Track intervention (Foster & Jones, 2006), the intervention was more likely to be cost-effective for boys that were highly aggressive at entry into the Fast Track intervention compared to their peers, thus resulting in a more cost-effective implementation of the program than would an untargeted implementation.

Cost, cost-benefit, and cost-effectiveness analyses can have an important influence on budgetary priorities in education and may be helpful in demonstrating the value added by ESMH programs, prevention programs, and mental health intervention programs. Even a small number of well-selected and well-designed cost-benefit or cost-effectiveness studies could have a large effect on public decision makers' view of the value of ESMH programs in schools. Programs that have preliminary evidence of positive effects on school-related behaviors and functioning, are designed to be upward scalable, and are implemented on a larger scale would make good candidates for economic evaluation.

Making economic evaluations a more routine component of program evaluation in schools will require commitments of resources by state and/or federal agencies to set up evaluation infrastructure and obtain needed evaluation expertise. In order to carry out these types of assessments, schools need databases that provide detailed information on resource and program costs tools that are designed to extract information from existing school accounting databases and other systems. Regular collections of data on standardized student-level outcome metrics that are appropriate to the education setting are also needed. Standardized measures of academic achievement, such as adaptive quantitative test scores, are probably too narrow for this purpose, because they may not be sensitive to changes in behavior or emotional health. Other scales for measuring academic progress or adaptive behaviors in school could form the basis for a standardized cost-effectiveness outcome in education.

Even though expertise in economic evaluation methods is also needed for economic evaluation, schools can obtain this expertise in various ways. Forming academic partnerships and partnerships with consulting organizations represents the most expedient approach. School or program staff could also acquire evaluation skills through training programs, such as master's level or mini-course economic evaluation training programs that now are offered by several universities.

Even if economic evaluations are not used regularly to assess prevention and mental health intervention programs in schools, an appreciation of the economic approach to evaluation offers a potentially valuable perspective for clinicians and administrators who are involved in these programs. The economic value of these programs depends largely on whether they significantly improve child and adolescent behavioral functioning in school and students' academic progress. If programs are able to improve these outcomes, it is likely that they will generate positive future economic benefits. This perspective suggests that programs should make every effort to track these outcomes in their programs and should adopt "evidence-based" prevention and intervention models that have been demonstrated to result in improvements in behavioral functioning and academic progress.

Conclusions

To combat the challenges associated with obtaining funding and sustaining ESMH programs, it is imperative that ESMH programs explore various levels (e.g., national, state, and local) of funding to build a collection of funding streams to adequately sustain programs. Multiple sources of funding are needed in part because funding agencies often stipulate the types of services that can be reimbursed and the population of students (i.e., general education vs. special education) who can receive services. According to Price and Lear (2008), ESMH programs need to expand their capacity to successfully compete and obtain grant funding, through several key characteristics including building collaborative partnerships, strengthening interagency communications, refining system of care models of mental health services, and identifying advocates for policy and program changes. In addition, it is important that policies at the national, state, and local levels commit funds to support mental health services in schools. For instance, if school districts such as in Los Angeles County, California, budget general school district funds (i.e., district tax dollars that are not tied to any particular program) to support the delivery of mental health services in schools, it will increase the capacity of ESMH programs in treating youth with emotional and behavioral problems. Lastly, as schools enter an era of more rigorous review of their budgets, they require knowledge of the costs and cost-effectiveness of their programs. Schools may find advantages in implementing processes and systems to track resource use and to estimate the costs of the services they provide, including SMH services. Tracking costs more accurately can reveal how a school's resources are being allocated and can create an opportunity to meaningfully compare the cost implications of alternative uses of a school's resources further supporting the need to fund ESMH programs.

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Preparing School Mental Health Professionals: Competencies in Interdisciplinary and Cross-System Collaboration

Kurt D. Michael, Seth Bernstein, Julie Sarno Owens, Abby Albright, and Dawn Anderson-Butcher

Over the last 10–15 years, there has been significant momentum in the development and implementation of school mental health (SMH) programs, both nationally and internationally (e.g., Kumar et al., 2009; Weist, Lindsey, Moore, & Slade, 2006; Wells et al., 2011). The impetus has been based largely on the prevalence of mental health ailments among children and adolescents coupled with the opportunity to treat them in a context where they spend the majority of the day. When done well, SMH programs are embedded within existing educational systems to provide a continuum of care for students with a range of mental health conditions, educational needs, and disabilities; and SMH professionals must be proficient in working within these systems (Kutash & Duchnowski, 2011; Mellin & Weist, 2011). For instance, the federal Individuals with Disabilities Education Act (IDEA, 2006) governs how school systems provide special education and related services to youth with various disabilities, many of which have a mental health component. Another educational paradigm relevant to SMH is Positive Behavioral Interventions and Supports (PBIS; Simonsen, Sugai, & Fairbanks, 2007). PBIS is a framework to promote and select effective instructional and behavioral practices for all students, from broad-based prevention to individualized services. These systems provide examples of the interdisciplinary context within which SMH providers must integrate their practices.

Ideally, facilitating school success for students requires effective collaboration among professionals from traditionally disparate systems (e.g., education, health, and mental health). That is, across the spectrum of student needs, the professionals who deliver the identified services should integrate their work to avoid unnecessary duplication and potential fragmentation to

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promote the wellness of the whole child. However, achieving this integration and collaboration is fraught with specific challenges (Mellin, Anderson-Butcher, & Bronstein, 2011). One challenge faced by even the most seasoned SMH professional is the need to operate within an educational context with demands and expectations that are largely different than traditional mental health settings; that typically includes a private office with strict boundaries around access and confidentiality, including the length of the client's visit. In contrast, schools are typically bustling with activities and teeming with professionals from a broad range of disciplines. Even getting a space to see a student can be a challenge, and the length of a visit can vary from 20 min to a typical "therapy hour" (e.g., Michael, Renkert, Wandler, & Stamey, 2009).

Similarly, SMH practitioners have to be prepared to address the competing demands on the students for their time. That is, if a student with elevated depressive symptoms has been persistently tardy or absent, SMH providers need to address not only the depression but the lost instruction time as well. In other words, depression and school attendance are typically intertwined, and practitioners need to balance the need to address the psychological and the educational implications simultaneously. Stemming the tide of excessive absences serves the dual purpose of preventing the student from getting even farther behind academically and becoming even more estranged from the educational milieu and the socialization that occurs through attending school. Indeed, Shochet, Dadds, Ham, and Montague (2006) reported that "school connectedness" as measured by the Psychological Sense of School Membership (PSSM; Goodenow, 1993) was significantly and inversely related to depressive symptoms, both concurrently and 1 year later. It is argued that a behavioral indicator of school connectedness is actual attendance, certainly an important value regardless of whether you are a mental health provider or school administrator. Thus, effectively intervening in this case would hinge on the extent to which the educators and the SMH providers can flexibly negotiate an integrated treatment plan meeting the unique mental health and educational needs of that student, beginning with improved school attendance.

Further, teachers offer a conduit for the implementation of evidence-based mental health promotion, prevention, and intervention efforts in the classroom (Ball, 2011). However, SMH practitioners must also be prepared to address the competing demands on teacher's time. As much as classroom teachers and school administrators are often very concerned about student mental health, SMH practitioners must be sensitive to the primary currency in public education (e.g., instruction time) if they expect to garner the ongoing support of school officials to continue to effectively execute their mental health responsibilities with students.

As the aforementioned example illustrates, training graduate students and other professionals how to negotiate the needs of multiple systems and individuals while delivering effective services is challenging. It is common for graduate training programs that are focused on training child service providers to offer supervised training experience in clinical settings, including community and school placements. However, it is less common that trainees participate in learning experiences that *systematically* focus on the development of competencies needed for interdisciplinary and intersystems clinical work (Splett, Coleman, Maras, Gibson, & Ball, 2011). In the absence of this systematic focus, students graduate, obtain employment in an environment that demands interdisciplinary collaboration, and, like many professionals in the field, are left to develop the skills while on the job. Commonly, professional development training for interdisciplinary collaboration in SMH is either not available or not comprehensive enough to meet the demands of the role (Morris & Hanley, 2001). Thus, most training models create a dynamic where a group of typically disparate professionals, although competent in their own specialties, do not possess competencies in interdisciplinary SMH delivery at the outset. This situation is analogous to a ship that is being built after it has been launched. It might float, but other aspects of the ship's performance are not being maximized. The purpose of this chapter is twofold: (1) to

outline the competencies that facilitate interdisciplinary and cross-system service coordination among SMH professionals in the educational context and (2) to offer examples of training models and learning experiences (at both preservice and in-service levels) that systematically focus on the development of competencies needed for interdisciplinary and cross-system clinical work.

Defining School Mental Health Service Delivery

National initiatives have advocated for the expansion of school mental health services as a mechanism for enhancing access and utilization of services for children in need (e.g., New Freedom Commission on Mental Health, 2003). In alignment with these proposals, expanded school mental health frameworks have been articulated (e.g., Adelman & Taylor, 2003; Weist & Albus, 2004). These frameworks promote collaborative efforts among school professionals, community professionals, and families to promote, provide, and reinforce the use of evidence-based services that span the continuum of care. The frameworks call for a distribution of efforts across mental health promotion, risk prevention, screening, assessment, early intervention, and intensive intervention activities. Further, collaborative school mental models, when successful, are not about simply moving services under a new roof, which is more akin to a kiosk approach to mental health in which services are simply placed in the school system rather than integrated within the preexisting systems of education and care (Michael et al., 2009). Rather, the goal of collaborative models is to integrate quality services from multiple disciplines as well as the expertise of multiple parties (e.g., school and community professionals, parents, youth) to create an interdisciplinary synergy that produces positive student outcomes that are greater than those that could be achieved by any contributor working in isolation (Mellin & Weist, 2011). In order to achieve this goal, however, each partner must "come to the table" with the skills necessary to value the contribution of other partners, to leverage their expertise, and to collaboratively problem solve to find the synergy and to maximize the potential of the group to achieve the best outcomes for the student. In order for interdisciplinary collaboration to be successful, each party needs to be open to learning about one another's perspective and the unique knowledge they can offer (Mellin et al., 2011).

The last decade has witnessed a proliferation of school mental health services across the continuum of care, such as the mental health promotion initiatives (e.g., Sanders, 2008), social and emotional learning initiatives (e.g., Domitrovich et al., 2010), positive behavioral interventions and supports programming (PBIS: Simonsen et al., 2007), screening initiatives (e.g., Jones, Dodge, Foster, Nix, & Conduct Problems Prevention Research Group, 2002), and multicomponent, intervention programs that address risk factors and mental health problems among children and adolescents (Evans, Schultz, DeMars, & Davis, 2011; Masia Warner, Fisher, Shrout, Rathor, & Klein, 2007; Owens, Murphy, Richerson, Girio, & Himawan, 2008). Outcome data from these programs have produced several important findings. First, culturally sensitive, media-based marketing strategies can successfully expand the reach of mental health promotion and psycho-education information to parents (see Sanders, 2008 for review). Second, screening initiatives that use psychometrically sound measurement tools can identify at-risk children early in their academic trajectory (Jones et al., 2002). Third, school- or class-wide systems that promote social, emotional, and behavioral competencies can reduce inattentive and disruptive behavior, improve school climate, and enhance academic performance (e.g., Kam, Greenberg, & Kusch´e, 2004; Tingstrom, Sterling-Turner, & Wilczynski, 2006). Finally, there is evidence that targeted intervention programs reduce symptoms and impairment in youth with identified mental health problems (e.g., Evans et al., 2011; Masia Warner et al., 2007; Owens et al., 2008).

Despite this promising evidence, it is important to note that simply placing these initiatives within the school building (e.g., the kiosk approach) will likely be insufficient to produce desired outcomes (e.g., Bickman et al., 1995; Mellin & Weist, 2011). Instead, these initiatives need to be systematically integrated and coordinated across multiple partners, including students, families, educators, health and mental health providers in order to maximize generalizability of successful outcomes across individuals and systems. Such integration and coordination requires multiple competencies in interdisciplinary collaboration (Michael, Renkert, Winek, & Massey, 2010).

Broad Vision for Interdisciplinary and Cross-System Training in Health Care

The Institute of Medicine (IOM, 2003a, 2006) as well as many other national initiatives (e.g., President's New Freedom Commission on Mental Health, Surgeon General's Conference on Children's Mental Health) US Dept of HHS (2001) have strongly recommended a transformation in our health care system to enhance accessibility of affordable, culturally sensitive, and evidence-based care. Achieving transformation in the SMH delivery system requires a revolution in the education and training of health, mental health, and education professionals so that the product of our training programs is a professional who is capable of leading or participating in an efficient, integrated, interdisciplinary team that collaboratively delivers evidence-based interventions in the school setting. That is, these typically disparate systems and individuals convene regularly (often weekly) to discuss, plan, and implement interventions. Thus, in order to prepare professionals for an interdisciplinary climate, where each is leveraging the expertise of the other to create a treatment plan that maximizes resources and reduces redundancies, training should no longer occur in isolation. As stated by the IOM, "All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches and informatics" (IOM, 2003b, p. 45).

In addition, training should no longer occur in a primarily didactic format. Key themes that have emerged from the existing literature on adult learning include the following: (1) learning should be interactive, (2) knowledge acquisition and application of this knowledge should occur in similar contexts, (3) application of the knowledge should be practiced multiple times, (4) learning should occur by applying knowledge and skills to an existing professional problem, (5) learners should be periodically reviewed and provided with performance feedback, and (6) the teaching process should take advantage of influential peer leaders (Stuart, Tondora, & Hoge, 2004). In the medical field, one study showed that 64 % of educational sessions that used two more of these teaching strategies produced positive changes in physicians' behavior; however, when three or four of these teaching strategies were applied, the positive change rate increased to 79 % (Davis, Thomson, Oxman, & Haynes, 1995). To teach effectively, the evidence argues for using multiple teaching strategies, in a longitudinal, sequenced approach (e.g., learn, work, learn) where didactic instruction is paired with experiential exercises (Stuart et al., 2004).

Models of adult competence assessment highlight the hierarchy of skill development that includes "know," "know how," "show how," and "do" skills (Miller, 1990). In alignment with social learning theory (Bandura, 1977), these models underscore that competencies are best learned in a social environment via observation and modeling, and when feedback or reinforcement is provided for successive approximation of the desired skill. Multiple studies show that the best outcomes for skill development occur when training includes interactive activities (e.g., modeling, role plays) with performance feedback focused on increasing knowledge about the application of the intervention (e.g., skills) and follow-up resources that enhance integrity (Blank et al., 2008; Han & Weiss, 2005; Stuart et al., 2004; USDOE, 1999). Enhancing factual knowledge may be necessary for enhanced implementation integrity, but not sufficient

(Miller et al., 2006). For example, didactic trainings for mental health professionals produce significant increases in both perceived and declarative knowledge; however, this increase in knowledge does not translate into behavioral proficiency (see Beidas & Kendall 2010 for review).

Given these needs, national policy priorities such as the Annapolis Coalition's report on Workforce Issues in Behavioral Mental Health (Hoge et al., 2006) and the New Freedom Commission on Mental Health (2003) have called for new, innovative, cross-system workforce preparation programs that include evidence-based adult learning strategies to facilitate competency development in the areas of SMH, interdisciplinary practice, and cross-system collaboration.

Along with visions for change, however, come challenges and barriers that must be addressed. One of the primary challenges to developing training experiences and/or comprehensive curricula focused on interdisciplinary preparation is that each discipline has its own specific curricula that are mandated by the discipline's accreditation body (Morris & Hanley, 2001; Splett et al., 2011). These curricula are often time-intensive and leave little room for flexibility. Despite the unique focus of each discipline, however, there are some common themes and goals in the accreditation and practice standards across disciplines that offer opportunities for training in interdisciplinary and cross-system competencies.

Defining Interdisciplinary and Cross-System Competencies in SMH Service Delivery

As described above, the impetus for the proliferation of SMH programs is based primarily on two factors: (1) the prevalence of mental health ailments among children and adolescents and (2) the opportunity to access and serve them in a setting where they spend much of their day. However, the vast majority of SMH programs are developed and implemented by "outsiders" (e.g., university researchers, community mental health staff) in a system of "insiders" (school counselors, school social workers, school psychologists, teachers, etc.). Thus, the success of these programs is dependent on how well the school employees and mental health partners in the community function together to achieve common goals. As Brown, Dahlbeck, and Sparkman-Barnes (2006) pointed out, the critical unit of analysis in determining success is an appraisal of whether the relationships among professionals are truly collaborative. Brown et al. surveyed both administrators and professional school counselors about working with mental health professionals who were not employed by the school district. Some of the unprompted responses were telling. For instance, one administrator said "outside mental health professionals need to thoroughly understand how schools operate and the restrictions schools have on them" (p. 333).

Thus, for the purposes of this chapter, interdisciplinary and cross-system collaborations apply both to professionals from different disciplines *within* the school system (e.g., school counselors, school social workers, school psychologists) and to the collaboration *between* those employed and not employed by the school system (e.g., university and community partners). Both types of collaboration require SMH professionals to competently develop and manage their relationships and job roles in the service of student success.

To date, the most comprehensive review of SMH competency development was conducted by Ball, Anderson-Butcher, Mellin and Green (2010). Ball et al. examined common professional competencies for practice within five disciplines working in SMH, including school social work, psychology, special education, general education, and school health. They also examined competencies from interdisciplinary groups and organizations such as the National Assembly on School-Based Health Care (NASBHC, 2007). The initial list of competencies was reviewed by a national panel of leaders in SMH, followed by an analysis of the extent to which the SMH competencies were reflected in existing accreditation and practice standards in disciplines such as school psychology, special education, and social

Table 1 Competencies in interdisciplinary and cross-systems collaboration

2.	*Interdisciplinary collaboration: communication & building relationships*
2.1.	Demonstrates effective communication skills with school personnel, families, and community and other stakeholders
2.2.	Collaborates with others in ways that demonstrate a valuing and respect for the input and perspectives of multiple professionals and disciplines
2.3.	Builds positive relationships with other school personnel, families, and the community
2.4.	Participates effectively in teams and structures
2.5.	Provides effective consultation services to teachers, administrators, and other school staff
2.6.	Facilitates effective group processes (conflict resolution, problem solving, etc.)
2.7.	Demonstrates knowledge of variances in communication styles
2.8.	Identifies, describes, and explains the differing roles and responsibilities of other helping professionals working in and with schools
3.	*Engagement in multiple systems & cross-systems collaboration*
3.1.	Collaborates with families in support of healthy student development
3.2.	Collaborates effectively within and across systems
3.3.	Values the input and perspectives of multiple stakeholders
3.4.	Identifies and knows the protocols for accessing various school- and community-based resources available to support overall school success and promote healthy student development
3.5.	Effectively navigates school-based services through appropriate pre-referral and referral processes
3.6.	Participates effectively in planning, needs assessment, and resource mapping with families, school and community stakeholders
3.7.	Coordinates and tracks the comprehensive services available within the community to support healthy student and family development

Note: Reprinted from Ball et al. (2010) with permission from Springer (license # 2885601356555)

work. A common set of competencies to support interprofessional (or interdisciplinary) practice in SMH was subsequently created. A total of 51 competencies were identified across seven domain areas: (*1) Key Policies and Laws*; (*2) Interprofessional Collaboration; (3) Cross-System Collaboration; (4) Provision of Academic, Social-Emotional, and Behavioral Learning Supports; (5) Data-Driven Decision Making; (6) Personal and Professional Growth and Well-being;* and (*7) Cultural Competence*. Each competency is defined by three components: knowledge, skills, and dispositions/values. As described above, the two domains that are the focus of this chapter are interdisciplinary collaboration (IC) and cross-system collaboration (CSC). Across these two domains, there are 15 competencies (see Table 1).

The first domain, IC, includes competencies such as knowledge and skills related to effective communication, having the ability to collaborate with others individually and in teams, building relationships with others, and understanding the roles of the various professionals and disciplines working in and with schools. The opening vignette about the student struggling with depression and absences highlights the need for this set of competencies. Namely, to effectively address both the academic and psychological needs of the student, the SMH professional (whether employed by the school district or not) must be able to communicate and establish relationships with the student, his teachers, the principal, other possible SMH professionals in the building, and the student's parents to assess the situation and to solicit ideas and garner support for a collaborative treatment plan. Further, in developing such a plan, the SMH professional must understand the divergent perspectives and roles of each team member and must navigate the competing demands and priorities that they each face.

The second domain, CSC, involves the knowledge and skills needed to practice across multiple systems and among diverse stakeholders

(including families), particularly in relation to school-family-community coordination. It includes the knowledge and navigation skills necessary for understanding the SMH referral process and protocols, leveraging resources to support learning and development, participating in planning processes, and coordinating and mapping the various interventions and services available in the school community.

Returning to the vignette once again, the competency here pertains to how well individuals across systems (education, mental health, health care, etc.) can foster a course of problem assessment and treatment that satisfies the demands of their job and the roles of their respective systems. SMH professionals must respect the principal's and teacher's need to address attendance and help to achieve this outcome. Similarly, the educators must respect that treatment of depression (via either psychosocial or pharmacological interventions) can lead to improved attendance and support the consideration of these interventions. Further, the school, health, and mental health professionals must all be respectful of parent and student preferences while also offering them educational materials so that they may make informed decisions in the treatment planning process.

The outcomes associated with these two important SMH competency domains include enhanced resources and services for SMH (Bemak, 2000), reduced service duplication and fragmentation (Anderson-Butcher & Ashton, 2004; Brown et al., 2006), and improved value of SMH among stakeholders (Keys, 1999). Theoretically, these competencies are also associated with improved student outcomes (e.g., improved academic, social, and behavioral functioning) as well. However, additional research is needed to confirm this hypothesis.

Although there are many barriers to transforming graduate and in-service training programs to address these competencies, some universities and organizations are experimenting with innovative program adaptations and expansions to provide learning experiences that systematically focus on the development of competencies needed for interdisciplinary and cross-system SMH work.

Innovative Examples of Training for Interdisciplinary Collaboration and Cross-System Collaboration in SMH

Given the importance of the Interdisciplinary Competency domain outlined by Ball et al. (2010), below we describe four exemplary SMH initiatives that provide training experiences that systematically focus on the development of competencies needed for interdisciplinary and cross-system clinical work. In particular, these initiatives highlight the individual competency items within the IC and CSC domains as described by Ball et al. (2010; see Table 1). We first describe two university training programs, Appalachian State University's Assessment, Support, and Counseling (ASC) Center and Ohio University's Youth Experiencing Success in School (Y.E.S.S.) Program, both of which emphasize IC and CSC in SMH at the preprofessional level. We then illustrate competency development in these areas in a professional SMH program, Boys Town South Florida's School and Family Support Services (SFSS) Program, followed by a description of the Mental Health-Education Integration Consortium (MHEDIC), a national SMH group that spans across pre- and post-professional levels.

Appalachian State University's Assessment, Support, and Counseling (ASC) Center

The Assessment, Support, and Counseling (ASC) Center, an interdisciplinary SMH partnership between Appalachian State University (ASU) and Watauga County Schools (WCS), was developed and first implemented during the 2006–2007 academic year. It has been expanded into three additional rural school districts in western North Carolina, and it is now funded by a variety of sponsors, including the North Carolina Department of Public Instruction and the US Department of Health and Human Services, Administration for Children and Families (Code of Federal Domestic Assistance

93.235). The partnership was developed to address mental health related impediments to learning. The primary goals of the partnership are (1) to provide access to effective and closely supervised mental health services to children and families regardless of the ability to pay and in light of barriers to receiving treatment and (2) to provide graduate trainees and professionals with systematic exposure to interdisciplinary training, teaching, research, and service (Michael & Albright, 2012).

The primary modes of intervention are brief, problem-focused individual therapy, case management, consultation, and referral. The principle source of clinical labor is the graduate trainees under the close supervision of a licensed doctoral faculty in Psychology, Social Work, and Marriage and Family Therapy; a full-time school-based licensed clinical social worker; and a master's level psychologist. Other regular members of the ASC team include administrators, community mental health clinicians, counselors, and student resource officers (SROs). The essential feature of the ASC Center is that a large group of professionals and trainees meet weekly to discuss the students and families served by the ASC Center (approximately 10 % of the student body). Each member of the ASC team, whether serving as a graduate student therapist, a professional school counselor, or a faculty supervisor, has an equal opportunity to comment on cases, provide feedback, and receive guidance and supervision. The discussions are lively and all viewpoints are valued. Thus, from both practical and structural perspectives, the culture of ASC places a premium on interdisciplinary collaboration and provides ample opportunities to do so, regardless of status or discipline. Once a case has been referred to ASC and assigned, the primary therapist collaborates regularly with teachers, administrators, and other school staff to develop a data driven treatment plan that is closely monitored to provide the best opportunity for success, including formative and summative evaluation procedures.

With regard to the development of CSC competencies, the ASC model also provides direct exposure to working with professionals across systems, including school districts, community mental health, social services, law enforcement, and the medical community. It is often the case that the comprehensive treatment plan includes community providers (e.g., physicians, psychiatrists) and other professionals, such as those in the legal system (e.g., court counselors, lawyers). Thus, just as the value of interdisciplinary collaboration is embedded within the model, so too is the expectation that effective mental health treatment requires the successful navigation across systems of care.

Ohio University's Youth Experiencing Success in School (YESS) Program

With funding from The Ohio Department of Mental Health's Office of Best Practices Residency and Training Program (OU05-26; OUPS 06–12; OUPS 07–12) and the Health Resources and Services Administration's Quentin Burdick Program for Rural Interdisciplinary Training (D36HP03160), faculty and graduate students at Ohio University have engaged in three learning activities that facilitate the development of the IC and CSC competencies described above. The goals of the learning activities are to (a) enhance knowledge and skills associated with delivering and evaluating evidence-based practices in school settings, (b) develop competencies related to inter-professional consultation and collaboration in the context of university-community partnerships, (c) educate preprofessionals about rural mental health practice, and (d) expose trainees to innovative technologies to facilitate future use of technology in professional practice.

The first learning activity is *Intensive Training in Evidence-Based Practices*. Students engaged in preparatory training and a yearlong intensive field placement in school mental health service delivery with case-based supervision in the context of the Youth Experiencing Success in School (Y.E.S.S.) Program (Owens et al., 2008). The Y.E.S.S. Program (www.yessprogram.org) is designed to provide evidence-based services that optimize development for youth with early-onset behavioral difficulties that are impairing peer relations, academic learning, and the development of

prosocial behaviors. The program has developed over the course of 10 years in the context of a university-community partnership that has included representatives from the university, the school districts, juvenile justice, child welfare, and community health and mental health agencies (see Owens, Andrews, Collins, Griffeth, & Mahoney, 2011 for a description of program development). In this context, students interface with professionals from multiple disciplines and engage in evidence-based interdisciplinary assessment, treatment planning, intervention implementation, problem solving, and clinical decision making. Through this year of training, students are given opportunities to practice and receive feedback on many of the skills listed in Table 1. In the context of the research agenda, we examine the effectiveness of evidence-based practices in community settings. Thus, trainees learn how to simultaneously engage in research and practice, and to examine intervention effectiveness in real-world settings. Further, trainees participate in program planning meetings that are attended by multiple stakeholders, including representatives from the school district, juvenile justice, and health and community health agencies. This experience exposes students to group processes involved in organizational leadership and the development and maintenance of cross-system partnerships.

The second learning activity is participation in *Interprofessional Didactic Seminars*. The goal of this training component was to deepen student's understanding of school culture and expose students to professionals from other disciplines (e.g., medicine, nursing, speech-language pathology, special education, law). In this series, students learned how these professionals conceptualize problems, and how they engage in assessment, intervention, and treatment outcome evaluation, and the skills needed for consultation and collaboration. This process is designed to enhance student's value and respect for the input and perspectives of professionals from other disciplines.

The third Y.E.S.S. learning activity is the *Interactive, Interprofessional Video-Conference Training Series*. This training opportunity allowed graduate trainees in the Y.E.S.S. Program to practice communicating via videoconference technology with psychiatry residents. Because a psychiatry training program is not available locally, we formed a collaborative partnership with professionals from Child and Adolescent Psychiatry within the Department of Psychiatry and Psychology at the Cleveland Clinic Foundation, a facility located over 200 miles north of Ohio University. This partnership provided psychiatry residents and graduate students from psychology and social work an interactive platform for discussing discipline-specific literature on evidence-based practices, discipline-specific biases and challenges to interdisciplinary collaboration (Owens, Hamel-Lambert, Murphy, & Quinn, 2006). This experience was designed to facilitate the development of many competencies listed in Table 1.

Boys Town South Florida's School and Family Support Services (SFSS) Program

Boys Town South Florida is an independent nonprofit organization and is affiliated with the original Father Flanagan's Boys Town in Omaha, Nebraska. Boys Town offers a continuum of services in 10 states, from prevention to early intervention to treatment. The In-Home Family Services™ Program is the primary model of intervention that helps families and children succeed in school, at home, and in the community. In South Florida, the analogous program is called School and Family Support Services (SFSS), which operates in 70 school communities. The success of SFSS depends heavily on interdisciplinary and cross-system collaboration. The program is implemented in Palm Beach County, Florida—the 11th largest school district in the country with over 174,000 students. The program's focus is to identify preschool and elementary age children who are at-risk through a universal screening process. Students are then prioritized based on need, and school-based and in-home interventions are provided to ameliorate social, emotional, behavioral, and family issues. The program's school-based staff work closely

with school professionals across the disciplines, and the process of collaboration is systematized through Palm Beach County's School-Based Team (SBT) process (much like the ASC team described above). The SBT convenes regularly to address student's academic and non-academic barriers to learning. The interdisciplinary team works collaboratively, sharing ideas and expertise from divergent perspectives. As a result of the collaborative process, interventions are designed and implemented to promote improved outcomes across family, home, and school domains.

Although much of this chapter focuses on training SMH providers at the preprofessional level (e.g., ASC, Y.E.S.S.), post-employment preparation of the SMH workforce is equally important. To this end, Boys Town nationally has established a three-phased approach that includes preservice training, consultation/supervision and a staff evaluation/certification process. For preservice training, newly hired staff who will be working with children and their families must complete a 2-week, standardized, skills-based training at the home campus in Omaha, Nebraska. During the training, staff members from all different programs and disciplines across the country receive didactic instruction on how best to work with clients, role play the use of particular strategies, and receive feedback on their performance. New staff members also take four exams over the course of the 2-week training, and must meet minimum performance criteria before being endorsed to serve clients.

In addition, after successfully completing preservice training, new hires proceed through an internal preparation process that includes further training and a significant amount of supervision and consultation. A significant amount of on-the-job training and exposure to school culture and collaboration is provided. Also, the supervisor to staff ratio is kept at a reasonable figure so weekly consultation can occur, regular on-site visits at schools and with children and families can occur, and quarterly staff development plans can be developed. As part of the continued learning process, each staff using this model is observed by an experienced supervisor and/or national trainer several times throughout the year and is rated with the Boys Town Model Fidelity tool to monitor the staff member's use of the model. The tool has several rating domains, including Relationship Building and Engagement, Teaching Components, Consultant Techniques, Safety, Resources and Supports, and Assessment and Exploration. In addition to being directly observed performing job functions, other data are reviewed in order to determine whether a staff qualifies to become a certified service provider, including client documentation, survey data from consumers (e.g., parents and referral sources) and an administrative survey completed by the supervisor. Each direct care staff must meet the minimum criteria in each area in order to be certified annually. There is a similar certification process to ensure model fidelity for the supervisors as well.

As highlighted throughout this chapter, Boys Town is committed to the values of IC and CSC within the context of service delivery. Moreover, the SFSS model and the training paradigm extend beyond the preprofessional level and provide an example of how SMH workforce development can be conceptualized and executed at the post-employment level. What follows is a description of another SMH enterprise that provides a blend of pre- and post-professional workforce development.

Mental-Health Education Integration Consortium: Development of Learning Communities

The Mental Health-Education Integration Consortium (MHEDIC) is a national group of SMH advocates with common interests in workforce preparation, service delivery, and the science of SMH (Anderson-Butcher & Weist, 2011). Members hail from various disciplines (e.g., social work, education, counseling, psychology, psychiatry, nursing, public health) and institutions (e.g., university, state and local governments, school systems, mental health systems) across the United States. Together, researchers, community mental health administrators, school leaders, graduate students, and clinicians involved in

SMH comprise a Community of Practice (CoP; Wenger, McDermott, & Snyder, 2002) which is focused on strengthening and systematizing workforce preparation for SMH.

At the core of MHEDIC is a steadfast commitment to IC and CSC, arguably the bedrock of effective SMH practice. Members of MHEDIC rotate hosting biannual meetings that center on four priority areas: (1) research, (2) policy, (3) practice, and (4) teaching/learning related to workforce preparation in SMH. Throughout the year, members conduct research and publish together, submit grants with multiple collaborators, draft and promote policy favorable to SMH initiatives, and share teaching/learning innovations and best practices. A respect and appreciation for the contributions of each discipline and system of care is evident in these shared endeavors.

A competency closely aligned with IC and CSC is the ability to participate on workgroups and within structures or learning communities related to SMH. The mission of MHEDIC exemplifies IC and CSC through its leadership structure and conference format that is set up around the four aforementioned priority areas. Each member self-selects into one or more of the priority areas which allows for the maximization of resources and capitalizes on the particular motivations of each MHEDIC member. From there, colleagues from around the country organize themselves along common themes in order to develop and execute SMH projects, frequently on a national or interstate level.

Perhaps the most compelling aspect of MHEDIC is the culture of IC and CSC and how this is modeled in real time by the current professionals for the benefit of the preprofessional trainees or those new to MHEDIC, including regional stakeholders, educators, and administrators from the host location. Thus, the seeds of IC and CSC are planted and sowed each time a MHEDIC meeting is convened. At the heart of MHEDIC as well as the other three SMH programs discussed in this section is the infectious spirit of interdisciplinary and cross-system collaboration that is transmitted each time one of the structural elements or learning communities is executed at pre- and post-professional levels.

Summary and Conclusions

There is a growing body of literature that promotes IC and CSC as essential competencies for effective SMH (e.g., Ball et al., 2010). A fundamental component of many SMH initiatives, especially those that have been sustained over longer periods of time, is a broad representation across a diverse array of mental health and educational personnel and systems. Moreover, the exemplars presented in this chapter place the values of IC and CSC near the top of the priority list, both structurally and culturally. Furthermore, these competencies are emphasized heavily across the continuum of pre- and post-professional development paradigms. Despite the presence of these elements, it still remains to be clearly demonstrated that these features are associated with better outcomes for students. Nonetheless, what does appear to be true as this point is that SMH professionals across disciplines and systems are generally satisfied when these competencies are described or otherwise explicitly valued. The time is ripe to test consistently whether these values and competencies are associated with benefits for those who SMH programs are designed to serve, students, families, and schools. Thus, those initiatives that already value IC and CSC should be the trailblazers in this important empirical endeavor.

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Preservice Training for School Mental Health Clinicians

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Many professionals in the mental health workforce in the United States have not received the requisite training and implementation support related to mental health prevention and promotion, evidence-based practice, and collaborative partnerships (Foster, Rollefson, Doksum, Noonan, Robinson, & Teich, 2005)—all essential components in the effective delivery of school mental health (SMH) services (Weist, 1997). The fit between delivering quality mental health services and the contingencies of operating in a school environment offers a considerable challenge for SMH staff. When clinicians are not trained, supervised, and supported for effective practice in the schools, they are at risk for professional burnout (Stephan, Davis, Callan Burke, & Weist, 2006), and more importantly, barriers to student learning will not be addressed effectively, resulting in unmet student needs and wasted resources.

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Given the high prevalence of emotional and behavioral challenges that interfere with student success (see O'Connell, Boat, & Warner, 2009), systematically integrating evidence-based mental health services and programming into the school climate and structure is critically important (Evans, Weist, & Serpell, 2007; Kazak et al., 2010; Weist, Evans, & Lever, 2003). A recent national survey of SMH program directors suggests that there is interest in this movement. Namely, program directors identified knowledge of evidence-based practices and programs as one of the top five important priorities for their clinical staff (Center for School Mental Health [CSMH], 2012). A review of the research suggests that successful school-community partnerships result in enhanced support and enrichment activities which improve student skills and build the network and connections to positive adults (Bathgate & Silva, 2010). Working in this collaborative fashion affords the opportunity for a shared family-school-community mental health agenda with greater family voice and partnership (Andis et al., 2002; 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, 2001). As more schools partner with community-based providers, there is an increasing need for more comprehensive preservice training for clinicians.

There is a growing literature supporting the value of SMH services (President's New Freedom

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Commission on Mental Health, 2003; U.S. Public Health Service, 2000) and a recognition of the fact that of the youth who do access mental health services, 70–80 % of them access these services in schools (Rones & Hoagwood, 2000). Schools provide a unique focus point from which to prepare the youth mental health workforce and are an essential component within the larger system of care for children and adolescents (Sebian et al., 2007). The need to understand and partner with schools is necessary for all mental health providers working with youth, regardless of service setting, system, and employer.

Workforce Challenges Related to Evidence-Based Practices

In recognition of the gap between existing training models and demand for EBPs, there is a growing interest across disciplines in the preservice training related to EBPs. However, implementing EBPs in schools offers numerous challenges that need to be taken into consideration. Three primary challenges are described below and are addressed within the course that is described in this chapter. First, while EBPs for many childhood disorders exist and there is interest among current SMH professionals to learn effective implementation, many EBPs have been tested in tightly controlled laboratories and more structured university-based clinics. It can be difficult to identify EBPs that have been validated and designed specifically to target the broad array of presenting mental health concerns within an educational setting. There is a recognized gap between clinical practice and clinical research that can make generalizability of research findings to real-world settings challenging (Weisz, Donenberg, Han, & Weiss, 1995; Weisz, Weiss, & Donenberg, 1992). In the last two decades, there has been increased recognition of the importance of context, including the context of communities and, more specifically, school settings (Ringeisen, Henderson, & Hoagwood, 2003). Schools are an important community setting that needs to be considered when conducting research that evaluates what EBPs to implement and how to best adapt them. In implementing EBPs, clinicians need training on not only the manualized protocols but also the skills to deliver such interventions, including the flexibility to adapt the program to fit into the school culture, setting, daily activities, developmental level, and level of engagement of the students. There is a need for SMH clinicians to have coursework rooted in ecological systems theory (see Atkins et al., 2006; Bronfenbrenner, 1979) that elucidates the systemic nuances that characterize schools. One strategy that is increasingly being used by the University of Maryland SMH programs under the leadership of the Center for School Mental Health is modularized approaches to evidence-based practice (see Chorpita & Daleiden, 2007). Clinicians learn the common elements to treating given disorders versus a specific training manual. This modular approach offers flexibility and creativity when space, money, resources, and time are all limited in schools.

A second preservice challenge to implementing EBPs is that although current training models are largely didactic, research indicates that adults learn best when the training is more interactive and involves skills practice. One study revealed that training clinicians in EBPs through interactive seminars, weekly supervision, and role plays improved their abilities to implement them, with higher fidelity than reading the manual or web-based learning alone (Sholomskas et al., 2005). The third preservice challenge to the delivery of EBPs is that while SMH delivery models require an appreciation of and skills related to interdisciplinary collaboration, most training is conducted in isolation within discipline. Interdisciplinary training allows for valuing the roles of other disciplines and offers strategies for effective collaboration.

The Course Masters and authors of this chapter (Lever, Weist, and Lindsey) sought to create a high-quality, interdisciplinary graduate level course that addressed the challenges related to implementing evidence-based practices to advance preservice SMH training. More specifically, as part of the preservice graduate training

course, we trained students to consider the context in which EBPs were developed and considered the unique adaptations and skill sets that would be needed to effectively deliver them in schools. We discussed the role of modularized approaches to evidence-based practice within our lectures and offered numerous opportunities for interactive seminars that included skills practice, case discussion, and role plays. Our course was intentionally taught by an interdisciplinary faculty and exposed graduate students to diverse stakeholder groups (e.g., youth, caregivers, educators, administrators, psychologists, social workers, professional counselors, psychiatrists) and was open to students across the university (social work, public health, nursing, etc.). The course intentionally focused on providing students with the necessary knowledge and skills to implement SMH within a three-tiered intervention framework in the school setting. The remainder of the chapter describes the history behind the course and the key foundation, structures, and assignments for the course.

Setting the Foundation for a Preservice Training Opportunity: A Course on School Mental Health

In 2008, a partnership between University of Maryland Baltimore's (UMB) School of Medicine and School of Social Work was formed to consider how to develop a state-of-the-art, interdisciplinary 15-week graduate level SMH course. More specifically, the Center for School Mental Health (CSMH), a national center on SMH with over 20 years of clinical experience providing high-quality SMH services in urban settings, and the University of Maryland School of Social Work, a highly regarded graduate school and the state's largest social work program, formed a partnership to leverage their unique experiences and expertise to develop a school mental health course. As a result of early meetings and discussions, we developed a course entitled *Best Practices and Innovations in School Mental Health*. Based on the CSMH's Ten Principles of Best Practice in SMH (Weist et al., 2005) and the identified gaps in the SMH workforce, the Course Masters of the UMB graduate course (authors Drs. Lever, Lindsey, and Weist) aimed to provide deep exposure to critical knowledge bases and key developments in SMH. The main objective of the course was to equip an interdisciplinary group of students (i.e., social work, nursing, public health) with the necessary knowledge and skills related to effective prevention and mental health promotion and intervention in the schools using a shared family-school-community mental health agenda. The course sought to expose students to the most relevant knowledge regarding training, practice, research, and policy as a means of promoting their roles as future leaders, administrators, advocates, and/or researchers in SMH. Likewise, the course aimed to promote understanding and appreciation of SMH for child and adult mental health providers within the larger system of care in Maryland and beyond.

Within the course, SMH was defined as an emerging interdisciplinary field seeking to provide a full continuum of mental health promotion and intervention to youth in general and special education classrooms. SMH services are offered through a shared agenda, which is developed and continuously improved by educators working collaboratively with youth, families, mental health providers, and other child-serving systems (e.g., child welfare, juvenile services, developmental disabilities; see Andis et al., 2002; Weist, 1997). As part of the course, a goal was to review dimensions of effective practice in the schools including stakeholder involvement, needs assessment and resource mapping, team functioning, school climate, universal and selective prevention, common practice components across diagnostic categories, treatment and case management for students presenting common emotional and behavioral disorders, and the delivery of culturally competent mental health services. A considerable emphasis was placed on assuring high-quality, evidence-based practice; this includes training in what makes an intervention evidence-based, how to determine whether the

intervention is a right match for the presenting child mental health need and the school setting, selection of the most appropriate staff to deliver the intervention, and strong and ongoing training, coaching, and support for the delivery of an evidence-based practice. In addition, the course emphasized student and program level evaluation, including how to use evaluation findings to feed into advocacy and policy change agendas, as well as leading the expansion of resources and the growth of SMH initiatives in communities and states. Key developments in SMH occurring at local, state, national, and international levels were presented, and students were encouraged to get involved in these opportunities through the CSMH, located on the University of Maryland, Baltimore campus. For the *Best Practices and Innovations in School Mental Health* course, there were eight course instructors, including the Course Masters, involved in advancing the graduate level training and the work of the center.

Related to best practices in adult learning and graduate teaching (Mezirow & Taylor, 2009; Taylor, 1998), the Course Masters intentionally designed the course to include multiple learning methods to prepare students to apply clinical practice skills with individuals, including lecture, discussion, role play, behavioral rehearsal, individual and group experiential exercises, field trips, and diverse stakeholder panels. Students were also encouraged and supported to integrate and apply various culturally competent approaches when working with children and families in SMH services through the readings, discussions, and exercises. Unique to this graduate student population, approximately half of the students were completing a school-based internship or had completed a school-based internship the previous school year. While participation in a school-based internship was not a prerequisite for the course, the assignments and experiential exercises integrated into each of the lectures provided an opportunity for students to demonstrate their ability to integrate their academic learning with practice. Students were encouraged to share the school-based and non-school-based experiences as part of the discussions within the class to consider application successes and challenges related to clinical practice and collaboration with schools.

Knowledge, skill, and attitude objectives outlined for the course are listed in Table 1. These objectives were distilled from the literature and from over 40 years of combined SMH experiences of the Course Masters.

In order to integrate the course, skill, and attitudinal objectives, the Course Masters identified four foundational areas of preservice training and intellectual content in SMH upon which the course syllabus was developed. They included (1) Why mental health in schools? (2) Setting up shop in schools, (3) Important stakeholder perspectives, and (4) Evidence-based practices in schools. In the sections below, content covered in interactive lectures and related applied assignments and experiential exercises are described by the training focus. Key content areas and related topics for lectures from the syllabus are provided in Fig. 1.

Training Focus 1: Why Mental Health in Schools?

Although psychological services have been provided to children and families in schools for several decades, the concept of expanded school mental health, involving close collaboration among school and community staff and ideally guided by stakeholders especially families, is a relatively new model in the fields of education and mental health. It cannot be assumed that youth, families, educators, and even school-based providers are aware of the potential services offered in the surrounding school and community and how to effectively collaborate and partner to improve the coordination and comprehensiveness of care. Consequently, clinicians are faced with the tasks of marketing to and educating youth, families, and school staff, as well as collaborating with community partners to deliver SMH services. In order to successfully get buy-in from the school, clinicians should be knowledgeable about research, practice, and policy related to the provision of a full

Table 1 Course knowledge, skill, and attitude objectives

Course objectives
1. Understand effective prevention and mental health promotion and intervention in schools
2. Gain knowledge regarding relevant training, research, and policy to promote students' development in roles as future leaders, administrators, advocates, clinicians, and/or researchers
3. Understand the impact of communities and social ecologies on the mental health and well-being of youth
4. Learn evidence-based strategies related to engaging key stakeholders (e.g., families, school personnel, community leaders) in SMH services
5. Understand the implications of diversity in SMH practice and the rationale for cross-cultural competence
Skill objectives
1. Identify qualities of effective SMH practices, including family engagement and empowerment, systematic quality assessment and improvement, and evidence-based practice for depression, anxiety, trauma, disruptive behavior disorders, attention deficit hyperactivity disorder, and psychosis
2. Identify and practice communication skills related to interpersonal interactions with key stakeholders in SMH service delivery, including families, school personnel, and community leaders
3. Integrate and synthesize evidence-based practices and approaches that are culturally appropriate and include activities such as treatment, outreach, or the use of community resources
4. Develop and plan effective intervention strategies that address key emergent issues in SMH service delivery
Attitude objectives
1. Expand and increase understanding of best practices and innovations in SMH service delivery
2. Commitment and motivation to offer culturally sensitive services and intervention strategies to marginalized populations
3. Openness to develop the knowledge and interpersonal professional skills requisite for effective SMH practice with children and youth
4. Demonstrate enthusiasm in learning more about SMH and ideally to become involved as effective practitioners and leaders in this emerging field

continuum of services (mental health promotion, prevention, intervention, consultation, and assessment). Clinicians also need to help youth by addressing their educational and concomitant emotional, behavioral, and developmental needs (Atkins, Hoagwood, Kutash, & Seidman, 2010). SMH graduate students should understand the basics related to children's mental health, how these mental health issues will manifest in a school setting, and the psychological and educational impact of these issues if they are not addressed. For example, youth with mental health concerns are less likely to be engaged in classroom activities, are more at risk of repeating a grade (U.S. Department of Health and Human Services [DHHS], 2010), and are susceptible to later academic, social-emotional impairments as compared to their peers (Essex et al., 2009; Valdez, Lambert, & Ialongo, 2011). These types of findings can assist with the identification of students, as well as help to highlight the need for SMH services to reduce negative student outcomes.

One example of how we had graduate students begin to consider the role of mental health in schools was through an assignment to view the documentary, *Waiting for Superman* (Chilcott & Guggenheim, 2010). The film showcases some of the disparities in the American public school education system and highlights possible areas of national reform to increase children's academic achievement and long-term success. Upon viewing the documentary, each student posted their reflection on the following: (1) What role/possibilities do you envision for mental health in schools after seeing the documentary? (2) What did you learn about how the structure and quality of the school/school system impacts the child's success (e.g., education, in their community, families)? and (3) What surprised you about the education system? After reviewing the documentary, each student posted their reflections to the

Unit I: Why mental health in schools? (e.g. reforms in education and child mental health; access; advantages; preliminary outcomes; family-school-community partnerships) (Sessions 1-2)

- *Why MH in Schools?*

Unit II: Setting Up Shop for Clinical Care in the Schools (e.g., referrals, consent, paperwork, liability, scheduling appointments, outreach, connecting with school teams, marketing, managing crises) (Sessions 2-3)

- *Effective Partnerships in Schools*
- *Setting Up Shop for Clinical Care in the School*

Unit III: Important Stakeholder Perspectives on SMH (Session 4)

- *Important Stakeholder Perspectives*
- *Field Trip to local high school with strong SMH program*

Unit IV: Evidence-based practices in SMH –(e.g., nuts and bolts; "Common Elements" (Overview of evidence-based practices, understanding the difference between what does it mean to be an evidence-based practice and what is practice based evidence, evidence-based practice by disorder area) (Sessions 5-12)

- *Evidence-Based Practice in Schools (Overview)*
- *Evidence-Based Practice: Best Practices and Unique School Implementation Issues by Disorder*
  - *Anxiety*
  - *Depression*
  - *ADHD*
  - *Disruptive Behavior Disorders*
  - *Trauma*
  - *Psychosis*
  - *Best Practice in Psychotropic Medications*

Unit V: Final Presentations/Review and Discussion (Session 13)

Fig. 1 Best practices and innovation in school mental health syllabus

three questions and posted a response to at least two other reflections by students. This assignment began the journey of self-reflection, as well as helped to promote and set the tone related to the importance of interactive discussion with other classmates.

To help set the foundation for SMH, a lecture was provided in which a definition, statistics about children's mental health, advantages and challenges of SMH, the history of the field including SMH milestones, and a three-tiered framework were presented. A primary component of the lecture was emphasizing the importance of collaboration with families, schools, and communities. To help make the session more interactive, licensed SMH clinicians affiliated with the CSMH and currently working in local, urban school districts were invited into the class to participate in a panel about collaboration practices. A set of questions was prepared for the panel to facilitate a question-and-answer format for the students. The panel provided a frontline perspective and offered students the opportunity to hear from some recently graduated peers in the field, including a former student in the course. Questions included:

1. Can you tell us about your role in school mental health and your educational background?
2. What do you see as the main differences between the work in more traditional community mental health and your work in school mental health? What do you see as unique about SMH?
3. What do you see as the benefits and challenges to your work in schools?
4. How do you see your role as being different from the role of a school-employed social worker or other mental health professional?
5. Can you cite in your work specific instances where you needed a "collaborative effort," involving various stakeholders, in the provision of SMH services?
6. How do "turf" issues manifest in collaborative mental health service delivery? Is there an example you each have experienced?
7. What has been your experience with referring students to community and hospital programs outside of the school?
8. In one or two sentences, can you describe why you are committed to SMH?

At the end of this section ("Why Mental Health in Schools?"), the Course Masters asked students to write a *Reflective Paper* that considered and articulated their prior assumptions related to SMH service delivery from the vantage point of a social worker or other professional. The idea was to stimulate students' thinking about professional development opportunities and potential challenges SMH personnel face in the delivery of services to children and families. Likewise, students were encouraged to critically think about how they would react to and problem solve around critical issues in SMH service delivery, especially in light of the presentations, panel discussions, and class discussions over the first three sessions of the course. The assignment also helped students reflect back on their previous experiences in schools, as both a professional and a student, as these assumptions may be similar to parents and teachers who are unfamiliar with the delivery of mental health services and programming in schools. The key goal of the assignment, however, was for students to become more cognizant of their preconceptions of SMH and identify training needs for future SMH practitioners.

Training Focus 2: Setting Up Shop in Schools

A primary aspect of training at the preservice level is to help graduate students to understand how to best market and set up their services within the school setting. In addition to a lecture on key considerations in setting up a school-based clinical program (Acosta, Tashman, Prodente, & Proescher, 2002), there was a panel of clinicians and two experiential exercises. Content areas considered in the lecture included meeting with the principal, resource mapping/needs assessment, understanding school-wide mental health teams, defining your services, getting the message out/building relationships, and setting up office/building a caseload. Following the lecture, current licensed school-based outpatient mental health providers, who had not participated in the first panel described in Focus 1, with a range of 2–8 years of experience in the field participated in a panel to provide a frontline perspective. They were first asked a series of prepared questions, and then the panel was open to the students for questions. The panel was asked the following questions:

1. What strategies have you used to get principal buy-in?
2. How do you typically get the word out about the mental health services at your school?
3. How have you gone about finding out about the unique needs of students, families, and staff in your school?
4. How do you get families to buy-in to the work that you are doing and to actually come to the school?
5. What are some of the unique opportunities and challenges that you have had in setting up services/program in your school?
6. How have you negotiated a good relationship with the school-employed staff?

The panel participants shared their successes and challenges in schools and made it clear that buy-in from families, school staff, and leadership is something that does not come without strategic effort and partnership. They emphasized the importance of linking the behavioral health work that they were doing to improvements in academic indicators to help gain buy-in from educators, administrators, and families. They also emphasized the many opportunities to access students and to work as part of an interdisciplinary team with youth and their families. After the lecture and panel portion of the seminar, an experiential exercise was conducted. Students divided into four groups with each having an assignment to prepare a 1–2 min. oral presentation to the following individuals in the respective setting: (1) parents/caregivers attending an elementary school parent-teacher organization (PTO) meeting, (2) teachers attending a middle school teacher-faculty meeting, (3) high school students attending a student assembly at the start of the school year, and (4) assistant principals and the principal attending an elementary school's administrative team meeting. Clinicians from the panel joined the groups and provided perspectives related to the specific stakeholder group targeted. The students were given the following directions for their presentations:

> You have been invited as the school mental health clinician to present on the topic, school mental health. Your job is to find the best strategy and language to present what school mental health is, why it is needed, and what impact it can have. Be as creative as you like with this exercise (Note: Think of it as a one to two minute infomercial or commercial. You need to get their attention and to "sell" school mental health.) Each group will have the benefit of having an expert (e.g., teacher, parent, youth, and administrator) who is a member of the stakeholder group to whom you will be presenting. Work "collaboratively" with your expert and take the time to try out your ideas with him or her. You should seek guidance on what will work or not work regarding your presentation.

The experiential exercise offered students the opportunity to apply what they had learned in a fun, interactive activity that offered a social marketing task that is regularly needed within schools. More importantly, this exercise taps into the critical factors identified by Stephan, Hurwitz, Paternite, & Weist (2010) when building capacity for SMH services at the local, state, and national level. Specifically, leaders in SMH are charged with the task of promoting an understanding among state and local education leaders, meaningfully engaging family members and youth in school mental health policy and program development, and implementing preprofessional and in-service training for educators and school mental health professionals (Stephan, Hurwitz, Paternite, & Weist, 2010). By having future clinicians critically think about these issues from a practical standpoint, they will be better prepared to help lead and advocate for the SMH efforts.

Training Focus 3: Important Stakeholder Perspectives

Perhaps the most powerful aspect of the course was a field trip to a nearby SMH program within a large urban high school. The trip offered the opportunity to hear perspectives from students, caregivers, teachers, administrators, school nurses, and the school-based outpatient mental health provider. The graduate students had the opportunity to tour the school and to meet with different stakeholders. Individual and group discussions with the different stakeholder groups were held for the graduate students. The following questions were asked of each of the stakeholders:

1. In your opinion, what is the most significant mental health problem youth in schools are experiencing?
2. Do you think mental health problems need to be addressed in schools? Why or why not?
3. From your own experience or that of others you have observed, how has school mental health made a difference in the life of a student, group of students, classroom, or whole school?
4. How can school mental health continue to be improved? What do you see as the future for school mental health?
5. What advice would you give to a person who wants to become a school mental health professional?

As part of the panel, the students learned about the stakeholders being most concerned about student depression and disruptive behaviors. They also discussed the difficulties of having a caseload of students who do not have the necessary anger management and coping skills needed to deal with daily challenges. Across the board, stakeholders expressed their belief in the value of providing services in schools and shared stories of lives they have shaped. They emphasized that the majority of students seen in school would not have received any treatment services without the program being at the school. Clinicians expressed concern about capacity and long-term funding stability within the programs. They appreciated opportunities to integrate evidence-based practices and programs and to work as part of an interdisciplinary team.

In addition to the school visit and the opportunity to hear different perspectives from the Course Masters, SMH clinicians, and faculty presenters, students were asked to conduct a school personnel interview with an individual besides the direct SMH provider. As part of the interview, students interviewed one school personnel (e.g., teacher, administrator, paraprofessional) to determine their perceptions of the challenges and opportunities related to the delivery of SMH services. Specifically, the interview focused on the interviewee's perception of the educational and mental health needs of youth in the school/community, the extent to which caregivers are engaged in educational and SMH service planning/delivery (if there is limited involvement, what is the plan for increasing their involvement?), the availability of community-based resources (e.g., mentoring and other academic enrichment programs), other key issues needing to be addressed, the specific individuals or organizations who need to be involved in addressing these needs, and what the interviewee sees her/his role in addressing existing needs or in supporting current successes. The idea of the interview was to foster the notion that multiple personnel within the school environment are responsible for the identification, referral, and ultimate treatment of children and adolescents in SMH.

Training Focus 4: Evidence-Based Practices in Schools

According to the American Psychological Association (APA), evidence-based practices (EBP) are defined as "the integration of the best available research with clinical expertise in the context of patient (child, adolescent, adult, family, group) characteristics, culture, and preferences" (American Psychological Association [APA], 2005, p. 1). The Institute of Medicine (IOM) holds a similar stance and defines EBP as "the integration of best-researched evidence and clinical expertise with patient values" (Institute of Medicine [IOM], 2001, p. 147). The delivery of evidence-based practices in SMH remains a key training issue and a challenge related to finding programs and practices that have been validated in school settings. The Course Masters sought to address this gap by providing the following experiences in the course: (1) invited guest speakers from our local SMH network who had key substantive and clinical experience in evidence-based interventions targeting child mental health problem areas, including anxiety, depression, disruptive behaviors, trauma, and psychosis; (2) experiential activities and clinical practice of skills with faculty modeling and then providing feedback to students in their role plays; and (3) deep exposure of evidence-based intervention in the school setting by having students develop an intervention project to address a child mental health need using evidence-based programs and strategies to address the problem they identified in the school.

The SMH guest lecturers, who discussed the delivery of evidence-based practices in school settings, particularly focused on modularized approaches to mental health treatment as guided by the "common elements" framework (Chorpita & Daleiden, 2007) and considered how these skills would be implemented in a school. For example, for children with depression diagnoses, the speaker discussed and offered opportunities to practice skills related to the common elements for depression treatment, including psychoeducation, cognitive coping, and activity scheduling. The lecturer also considered how the clinician,

teacher, and caregiver could implement these strategies across home, school, and community settings. Our decision to have colleagues present their lecture content within this framework is consistent with our agenda at the national CSMH to train SMH practitioners on evidence-based strategies that have high utility and external validity in a school setting. In particular, our SMH clinicians and graduate trainees have appreciated learning the "common" strategies across interventions targeting depression, for example, rather than needing to learn and have access to numerous and often costly manualized interventions. The authors believe that this common elements strategy used in individual treatment may also be successfully applied to the classroom setting. That is, in lieu of selecting from the myriad of classroom-based interventions, key skills that are associated with evidence-based classroom interventions to address particular behaviors can be introduced. For each of the lectures, students had an opportunity to practice common element strategies via experiential exercises that augmented the lecture content. These exercises included role plays and behavioral rehearsals, and each lecturer was encouraged to first model the clinical skills and then to provide feedback to the students during the application exercises related to the strategies/practice elements.

In addition to the lectures, the final assignment for the course was an evidence-based intervention project intended to help consolidate the reading, lectures, and exercises throughout the course. For this project, students were asked to imagine that they were serving as "mental health consultants" to a school and that they were being asked to prepare a set of recommendations that could be implemented over a 1-year time period. Students were encouraged to use the school that they had chosen for their interview project and to select an actual problem that the school was experiencing. As consultants, their role would be to help the school address a mental health problem or concern at all three levels of the public health triangle. Students first outlined basic information about the school they selected (e.g., grade level, demographics, standardized achievement scores) and the history of the problem or issue that they had selected. Students were required to develop a three-tiered intervention response that considered evidence-based practices or programs at each level. The problem or issue could be one that focused on a mental health problem (e.g., aggressive/disruptive behaviors, bullying, trauma) or a service delivery issue (e.g., engaging families in treatment, SMH responses to a catastrophic event). The student's approach to addressing the problem followed a public health framework for prevention and/or intervention. That is, students had to consider interventions at the tertiary level (targeting approximately 5 % of students), secondary level (targeting approximately 15 % of students), and the universal level (targeting approximately 80 % of students). To address cultural sensitivity and culturally competent services, the assignment also required the student to reflect upon matters of class, race, gender, and/or sexual orientation that may be emergent within the problem area or issue. The assignment required students to rely upon most, if not all, aspects of SMH service delivery and best practices covered throughout the course, including components of effective services to address their problem area or issue. The assignment demonstrated their understanding of SMH delivery; the breadth and depth of their understanding of the evidence-based practice literature, including the basic overview of EBPs related to how to select an evidence-based intervention; and their ability to critically think about the application of best practices in a school context.

Summary and Key Themes Moving Forward

SMH is a growing field that has gained recognition across many related fields, including education, psychology, counseling, social work, psychiatry, nursing, occupational therapy, and others. Given that around one fifth of children and adolescents experience a mental, emotional, or behavioral disorder each year (O'Connell et al., 2009) and roughly 70–80 % of children

who access services receive services through the school system, SMH clinicians have the daunting task of delivering effective mental health interventions to meet the mental health needs of our nation's youth. To meet the needs of these students, it is imperative that the SMH workforce have a strong foundational knowledge of evidence-based practices, in addition to practical understanding of how to deliver services within a school system.

With the exception of school psychology, school social work, and school counseling, other disciplines that represent the SMH workforce rarely have specific training related to the provision of SMH services, let alone the implementation of evidence-based practices in school settings. Knowing the findings in the literature regarding the training needs of SMH clinicians and the reality of working with and training professional SMH staff, the authors developed the *Best Practices and Innovations in School Mental Health* graduate course at the University of Maryland Baltimore's School of Social Work to address preservice workforce needs. The course focused on addressing four key content areas: (1) Why mental health in schools? (2) Setting up shop in schools, (3) Important stakeholder perspectives, and (4) Evidence-based practices in schools. The sections below highlight both the strengths of the course and the challenging aspects about this type of graduate curriculum.

Strengths of the Course

One of the main strengths of the course was the applied nature of the material presented. The Course Masters aimed to pair practical, hands-on experiences, while building students' foundational knowledge of SMH. In order to have students critically think about SMH services as well as their own preconceived notions of SMH program effectiveness, students were required to write Reflective Papers. Students were further challenged to examine their own biases and knowledge bases through panel discussions with licensed SMH clinicians and other stakeholders (teachers, administrators, students, caregivers, nurses) who are currently a part of local, urban school districts. These rich conversations allowed graduate students to gather information from the "experts" in their field and get a deeper understanding of what SMH clinicians and other stakeholders believe about student mental health and what they do on a day-to-day basis to address mental health concerns. Another strength of the course was the continual integration of a variety of experiential exercises. These included a group activity geared at social marketing SMH services, conducting interviews with school personnel, and developing a project based on imagining that they were hired as mental health consultants in a local school. Feedback about the course was obtained after each lecture, with at least one third of the comments related to the added value of providing practical experiential opportunities to bring the information, skills, and core messages to life.

Challenges of the Course

The Course Masters' good efforts were not without their share of challenges. First, even though the course emphasized intense exposure to evidence-based interventions and practices in school settings, the authors had no way of fully evaluating whether students were able to successfully apply knowledge gained from the course in their field placements in schools. While students provided examples of this application during lectures, the actual change in implementation skills was never assessed beyond self-reports. While students provided examples of this application during lectures, the actual change in implementation skills was never assessed beyond self-reports. Connecting the course to field education instruction might be one way to ensure students apply skills and core SMH training in a school setting. Second, students in the class often indicated a desire to allot more time for the practice of clinical skills. It seems that lectures and review of content often competed with students' interests in practicing the skills and getting feedback on their application. In particular they appreciated opportunities to first observe the faculty experts

modeling the skills and then having time for the students to practice and be coached by the expert in the skill. In a future implementation of the course, the Course Masters plan to consider the viability of incorporating "mock" clients (i.e., students and educators) as an experiential feature in the course. While we made every effort to have the course be as interdisciplinary as possible and have had public health and nursing student enroll in the course, it was mostly comprised of social work students given its location in University of Maryland's School of Social Work. Though the course was designed to be broad enough to branch across disciplines and included an interdisciplinary faculty, without the truly integrated cross discipline representation in students, it loses some of the different perspectives and foci that would come from graduate students in other disciplines. Lastly, another challenge of the course relates to the differing levels of ability and prior experience, including whether there has been exposure to working in schools. The Course Masters intentionally chose to include students regardless of their school-based experiences related to the belief and our experiences that all individuals working with children need to have some understanding of schools and how to effectively partner with school-based staff. Perhaps in the future there could be two levels of the course offered, one for introductory purposes and one for advanced students who are interested in careers in schools. This would also provide an opportunity to have a longer period of time with the students to work on more advanced clinical skill application. While currently, the course is offered as an elective, related to the great feedback about the course and to the interests of other faculty, there is some discussion within the School of Social Work to develop a school social work track and to make this course mandatory within that track.

As a whole, the course was successful based on student feedback given at the end of the course and throughout each of the lessons. In addition, several students from the course have entered the SMH field and have provided feedback related to the tremendous value of having taken the course. The primary lessons learned from this course include the value of having frontline providers involved in the training, opportunities for discussion with key stakeholders (e.g., students, teachers, administrators, caregivers, school mental health providers), and practical hands-on activities and exercises related to how to implement effective strategies and programs within a school setting. Courses such as this one are needed at the preservice level to increase the success and longevity of our mental health workforce committed to working in schools by increasing the number of clinicians who understand (1) the value of evidence-based practices and seek out the skills and supervision/coaching needed to provide a full continuum of evidence-based services within a school setting, (2) the unique opportunities and challenges related to working in the schools, and (3) how to work effectively as part of an interdisciplinary team that supports family-school-community partnerships. The course will benefit from the refinement from lessons learned from the continuation of this course and from other interdisciplinary faculty teaching similar courses across the country, as well as from research efforts to more systematically study the impacts of such SMH courses.

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Effective School Teams: Benefits, Barriers, and Best Practices

Robert S. Markle, Joni W. Splett, Melissa A. Maras, and Karen J. Weston

As a result of federal mandates such as the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) as well as the increasing use of methods such as Positive Behavioral Interventions and Supports (PBIS) and Response to Intervention (RtI) for providing necessary school services to students, interdisciplinary teams have become the norm rather than the exception in schools (Algozzine, Newton, Horner, Todd, & Algozzine, 2012; Nellis, 2012). School-based teams operate under a variety of names (student assistance teams, pre-referral teams, peer intervention teams, instructional consultation teams, teacher assistance teams, school improvement teams) and have an array of functions, including student referral and evaluation, planning service delivery, implementing evidence-based practices, and achieving systems change (Bahr & Kovaleski, 2006; Bahr, Whitten, & Dieker, 1999; Nellis, 2012).

Despite the prevalence of interdisciplinary teams in schools, however, evidence suggests that teams must adhere closely to evidence-based problem-solving procedures if they are to be effective at improving student outcomes (Kovaleski, Gickling, Morrow, & Swank, 1999). Due to the infrequency with which school teams adopt "best practices" for problem-solving, team processes are often inefficient and school staff are often dissatisfied with team functioning (Doll et al., 2005; Lee-Tarver, 2006). In addition, challenges such as marginalization of the school mental health (SMH) agenda (Doll et al., 2005), lack of teacher and administrative support (Nellis, 2012), resource and funding issues (Weist et al., 2012), turf disputes (Mellin et al., 2010), terminology differences (Bronstein, 2003), and time commitments (Burns, Wiley, & Viglietta, 2008) contribute to the difficulty in achieving successful team functioning. Thus, the mere establishment of teams is necessary but insufficient for accomplishing the goals of the SMH agenda. Teams must not only exist but must also secure buy-in and follow research-recommended operating procedures in order to deliver quality services to students.

Although leaders in the SMH movement have advocated for the establishment of interdisciplinary SMH teams (Ball, Anderson-Butcher, Mellin, & Green, 2010; Mellin & Weist, 2011; Weist et al., 2005), there is comparably less literature focused on how to build these teams or how to evaluate the team's functioning. Given the importance of effective team functioning for the advancement of

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SMH, the current chapter addresses issues surrounding the creation and functioning of school teams. First, we discuss the need for school teams and the benefits of establishing effective school teams. We then discuss challenges to successful functioning of school teams. Finally, we present some "best practices" for school teams based on recommendations in the school teaming literature and discuss a problem-solving framework teams can use to implement evidence-based innovations and evaluate team effectiveness.

The Need for Effective School Teams

The establishment of effective school teams is an important process for accomplishing the goals of the Expanded School Mental Health movement (Ball et al., 2010; Weist et al., 2005). Among the ten "best practices" for Expanded School Mental Health identified by Weist and colleagues (2005), three underscore the need for effective SMH teams. These practices include (1) the establishment of strong relationships among mental health providers, students, and educators (e.g., teachers and administrators); (2) the involvement of students, families, and teachers in the development, oversight, evaluation, and continuous improvement of SMH programs; and (3) the existence of quality assessment and improvement activities that continually guide and provide feedback for SMH initiatives. Interdisciplinary SMH teams are a vehicle for accomplishing each of the above objectives because they bring together school and community mental health providers, educators, students, and families to make collective decisions about SMH initiatives (Nellis, 2012). In addition, these teams can play a vital role in implementing and evaluating evidence-based practices to ensure quality service delivery (Mellin & Weist, 2011). In this section, we describe the small but encouraging research base supporting the benefits of school teams at both the individual and school level.

Benefits of School Teams

Although literature is relatively scarce with regard to the effects of teams at the student, school, and system levels, a few studies have attempted to demonstrate the benefits of teaming efforts in schools (Burns & Symington, 2002; Kovaleski et al., 1999; Kovaleski & Glew, 2006; Oppenheim, 1999). Burns and Symington (2002) reviewed nine studies on the effectiveness of pre-referral intervention teams and reported an overall effect size of 1.15 for student outcomes (e.g., time on task, task completion, scores on behavior rating scales, observations of target behaviors) and 0.90 for systemic outcomes (e.g., referrals to special education, new placements in special education, percentage of referrals diagnosed with a disability, number of students retained in a grade, increase in consultative activity by school psychologists). Additional research indicates that inter-professional collaboration in schools is associated with increased student attendance and academic achievement (Oppenheim, 1999), decreased levels of student misconduct (Smith, Armijo, & Stowitschek, 1997), and decreased referrals for evaluation and placement in special education (Kovaleski & Glew, 2006). Yet another benefit of effective school teams is that they serve to increase communication among those involved in promoting SMH (Mellin & Weist, 2011). Better communication, in turn, allows team members to align their goals, effectively reducing unnecessary duplication of services, allowing for professional support, and decreasing burnout among professionals (Anderson-Butcher & Ashton, 2004).

These results are promising and suggest that team efforts in schools can have large positive impacts for individual students, teachers and school psychologists, as well as beneficial effects for schools and school districts. Despite these benefits, however, research indicates teams must be well implemented to achieve outcomes and realize their goals (Kovaleski et al., 1999; Truscott, Cohen, Sams, Sanborn, & Frank, 2005). In a study of multi-district implementation of

instructional support teams (ISTs), Kovaleski and colleagues (1999) demonstrated that students in schools with instructional support teams had higher academic performance than control schools, but only for schools that implemented the team problem-solving process to a high degree. Low implementing schools did not display any significant academic outcomes compared with control schools. In addition, the authors found that high implementing schools were characterized by strong principal leadership, extensive up front and ongoing data collection to inform decision-making, and the involvement of support teachers to establish and fine-tune strategies selected by the team. Given the importance of these factors for effective team functioning, it is important to examine the numerous challenges that may prevent the team from delivering quality mental health services.

Barriers to Effective Team Functioning

Challenges to school team functioning include limited funding and resources, marginalization of the SMH agenda, role disputes, disciplinary differences, and lack of time. In this section, we discuss how these issues affect a team's ability to achieve its goals.

Limited Funding and Resources

Adequate funding and resources for SMH initiatives are essential for school teams to provide quality services and implement evidence-based practices with fidelity (Weist et al., 2012). As each discipline has its own priorities, limited resources set the stage for disputes among team members over how the resources will be divided. When funding is not available, the team must devote extra time and effort to securing funding from other sources such as grants and fee-for-service mechanisms (Evans et al., 2003).

Marginalization of the School Mental Health Agenda

A common outgrowth of limited funding and resources is marginalization of SMH services (Teich, Robinson, & Weist, 2007; Weist et al., 2012). Due to accountability systems such as No Child Left Behind, which place pressure on schools to improve students' academic achievement or face harsh consequences, the majority of school resources are allocated to academic instruction (Hoagwood, 2001). As a result, SMH services are often viewed as superfluous and irrelevant to student achievement (Walker, 2004). When administrations place little value on SMH services, it is easy for team members to become demoralized and unmotivated to pursue mental health endeavors.

Misunderstanding of Roles and Turf Disputes

Effective team members must have a clear understanding of their own roles as well as the roles of the other team members (Rappaport, Osher, Garrison, Anderson-Ketchmark, & Dwyer, 2003). Without a firm grasp of their own responsibilities, team members are not likely to understand how they can contribute to the team's efforts or how their expertise can complement the expertise of other team members (Bronstein, 2003). As a result, disputes can arise over who should be responsible for certain tasks, which may lead to inadequate provision of services or unnecessary duplication of services (Lever et al., 2003). Moreover, some team members may feel that actions taken by the team undermine their role or are intended to criticize their job performance (McKenzie & Scheurich, 2008). For example, if SMH professionals assume the role of an "expert" who works to "fix" teachers' problems, there is a high chance of offending teachers, understandably making them less willing to collaborate with the team.

Turnover Rates

High turnover rates make it difficult to coordinate services for students because when a member leaves the team, it is often unclear as to who will assume that member's roles and responsibilities (Weist et al., 2012). This is especially true in regard to mental health professionals from collaborating community agencies, who may frequently vacate their positions, preventing the

formation of strong relationships between important systems involved in SMH (Mellin & Weist, 2011). Although all teams experience turnover, team members who form strong relationships and who are enthusiastic about accomplishing the team's goals are more likely to remain on the team even when the work becomes stressful.

Time Commitments

SMH professionals, educators, and other school staff are often overburdened with a wide range of responsibilities, leaving little time for teaming and collaboration (Myers & Kline, 2001). In focus groups with school professionals involved in SMH efforts, participants have cited the unpredictable nature of school schedules and lack of time as a significant barrier to collaborating with other professionals (Mellin & Weist, 2011). However, without regular time for meetings, organization and delivery of quality and effective SMH services is unlikely to occur, underscoring the importance of allocating time for team endeavors (Bronstein, 2003).

Need for Problem-Solving Tools

In a survey of all 51 US state departments of education (50 states and Washington, D.C.), Truscott and colleagues (2005) found that although 86 % of states require or recommend pre-referral intervention teams, only 14 % of these states provided specific information on how to best establish and implement these programs. Further, while 85 % of states had an intervention team, most reported inconsistent inclusion of parents and community representatives, lack of clear consensus on team goals, seldom used an ecological perspective, and commonly recommended easy classroom interventions rather than substantive instructional modifications. Along with the above barriers, these data highlight the need for problem-solving tools that teams can use to evaluate their collaborative processes as well as monitor implementation of evidence-based practices. In the following section, we present some "best practices" for school teams to help them more effectively and efficiently achieve their desired outcomes with respect to school mental health.

Best Practices for Becoming an Effective School Team

While schools and mental health practitioners face many barriers in implementing teams, research indicates that taking time to develop and implement a team based on best practices leads to an increase in positive outcomes for children, schools, and families (Kovaleski et al., 1999). Although an increasing amount of the teaming research is empirically based (Burns & Symington, 2002), a significant amount of recommendations available are based on years of field-based experiences (e.g., The Community Toolbox developed by the University of Kansas Work Group for Community Health & Development, hereafter referred to as KU Work Group, www.ctb.ku.edu) and less rigorous evaluations, such as correlational studies (Burns, 1999). While these recommendations have not been fully vetted through the empirical research process, they pass the face validity test and come from experts in the field. Future research should seek to more rigorously evaluate these recommendations. In the meantime, the best practices described below are derived from a variety of research studies published in peer-reviewed materials (e.g., Burns & Symington, 2002; Chalfant & Pysh, 1989; Etscheidt & Knestling, 2007; Kovaleski et al., 1999; Mellin et al., 2010), literature reviews in non-peer-reviewed publications (Nellis, 2012; Powers, 2001), and well-respected publicly available resources (e.g., The Community Toolbox, National Technical Assistance Center on PBIS).

Best Practices

Securing Teacher and Administrator Buy-In

As teachers and administrators are the primary facilitators of school climate and maintain control over availability, implementation, evaluation, and sustainability of evidence-based practices, their support is critical to effective team functioning (Kovaleski et al., 1999). It is important for SMH professionals to keep in mind that teachers and administrators may not value collaboration unless the connection between student mental health and

academic outcomes is made abundantly clear (Doll et al., 2005; Weist et al., 2012). Examples of areas in which mental health and academic success are clearly intertwined include attendance, school dropout, and substance use (Reid, Gonzalez, Nordness, Trout, & Epstein, 2004). These focus areas can serve as entryways into meaningful collaborations that facilitate buy-in among educators who recognize the immediate relevancy of these issues to their work. For example, SMH professionals may find it helpful to initiate school-wide initiatives focused on improving attendance or increasing engagement to prevent dropout, such as a check-in/check-out group to increase connectedness among frequently absent and/or disengaged students.

It is also important for SMH professionals to treat educators as valued members of school teams, as opposed to simply valued "informants" to the SMH professionals regarding specific students or issues (Paternite & Johnston, 2005). Finally, given the time demands and constraints that are constant for those working within schools, SMH professionals can enhance support from educators by working to reduce the complexity of procedures and tasks and by ensuring that time is perceived as well spent; in other words, procedures and tasks produce data that have direct application to the improvement of classroom practice (Evans & Owens, 2010).

Team Members and Roles

Recruiting team members who fill important and necessary roles is a crucial aspect of developing and running an effective school team (KU Work Group, 2010; Powers, 2001). Across schools and types of teams, there can be a wide range of people and roles, including notetaker, timekeeper, case manager, data specialist, and coach or provider of implementation support. Regardless of the type of team, effective leadership is essential (Burns et al., 2005; Doll et al., 2005). The team should have a leader who is able to facilitate efficient and productive meetings, monitor the team's progress, and maintain accountability. These responsibilities require skills in group consensus building, conflict resolution, time management, and organization (Lambert, 1998). Involvement of school administrators is also recommended (Center for Mental Health in Schools (CMHS), 2008; Etscheidt & Knestling, 2007), such as assistant principals or others with authority and social influence as the essential role of these individuals is to provide time, resources, feedback, and support, all of which are important for accomplishing team goals.

At the systems and universal level, teams should include stakeholders from within and outside of the school, including community members and families (CMHS, 2008). Readers should refer to the extensive literature on family engagement in order to identify strategies for meaningfully involving families in team processes and decisions (Etscheidt & Knestling, 2007; McKay & Bannon, 2004; Nellis, 2012). Teams focused on individual students and/or small groups of students should also include general and special education teachers and specialists with specific knowledge such as school psychologists, school and school-based mental health clinicians, social workers, and speech language pathologists (Powers, 2001). In all, teams must include members with knowledge of the student(s), context, available resources, and principles of effective interventions (Doll et al., 2005).

Interdisciplinary Collaboration

As effective teams are composed of members that span a wide array of disciplines (Ball et al., 2010; Chalfant & Pysh, 1989), these members must learn how to interact and collaborate with one another to accomplish the team's goals. Research indicates that the extent to which individuals feel connected to the team is positively associated with team performance and that the quality of interpersonal interactions increases acceptance of team norms (Dierdorff, Bell, & Belohlav, 2011). To increase the effectiveness of group functioning, therefore, teams should strive for equitable relations, wherein the power differentials among team members—who are rarely ever equal—are minimized (Doll et al., 2005).

A leading model for interdisciplinary team collaboration developed by Bronstein (2003) describes five major elements that are essential to effective interdisciplinary team functioning.

First, teams must possess *role interdependence* in that they must rely on one another to accomplish the team's goals and activities. The second element, *newly created professional activities*, refers to programs and tasks that allow the team to accomplish goals that individual members could not achieve alone. The third element, *professional flexibility*, refers to the degree to which team members are able to expand their traditional roles and take on new responsibilities that enhance service quality. Fourth is *collective ownership of goals*, in which each member feels a collective responsibility for developing and achieving the group's goals. The fifth and final element of effective team collaboration in Bronstein's model is *reflection on process*. This element involves efforts by the team to evaluate their progress toward goals, solicit feedback from members, and utilize the feedback to continually improve the quality of service delivery.

One tool that teams can use to evaluate their collaborative efforts is the Index of Interprofessional Team Collaboration for Expanded School Mental Health (IITC-ESMH) (Mellin et al., 2010). The IITC-ESMH is a 26-item scale based on Bronstein's components of optimal collaboration, with a four-factor model: (a) *Reflection on Process*, (b) *Professional Flexibility*, (c) *Newly Created Professional Activities*, and (d) *Role Interdependence*. This tool can be used by school teams throughout the school year (i.e., every 3–4 months) to help the team reflect on their collaborative efforts. For example, teams can complete the measure during one meeting, have a member aggregate the responses in between meetings, and review the results at the following meeting. After the results are presented, teams can take time to discuss the findings in terms of what was expected and unexpected and can present new ideas and strategies for addressing challenges to team collaboration (E. Mellin, personal communication, June 13, 2012).

Clearly Articulated Purpose and Procedures

If teams are to acquire the essential elements of collaboration, they must establish a clear purpose and follow well-articulated, jointly developed operating procedures (Chalfant & Pysh, 1989; KU Work Group, 2010). Team members and stakeholders including teachers, students, families, and administrators should hold collaborative discussions during which a written mission statement, list of members, role definitions, and team procedure manual can be developed (KU Work Group). Team procedures include setting ground rules, establishing a regular schedule, using agendas and time limits, identifying a processes for making referrals or adding items to the agenda, documenting meetings, and following up between meetings and at subsequent meetings.

Team members should agree upon how often they want and need to meet as well as when, where, and for how long (Powers, 2001). Previous research indicates that insufficient time including poorly attended and/or scheduled meetings leads to dissatisfaction, and likely disinterest, in the team (Chalfant & Pysh, 1989). Thus, meetings should occur regularly and times/location should be communicated clearly such that team members can protect their schedule and fulfill their commitment to be at every meeting. In addition, meetings are more efficient when they follow a predetermined agenda, which includes who is responsible for agenda items and time limits (Nellis, 2012). Time limits are also important as lengthy meetings are likely to hinder the team members' interest and effectiveness (Chalfant & Pysh, 1989; Doll et al., 2005). For example, as a general guideline, referral teams may spend about 25–45 min discussing each student (Powers, 2001). In terms of developing the agenda, team members and persons making referrals to the team (e.g., teachers, parents) should know the preestablished process for making a referral. Referral paperwork should be streamlined, easy to understand, and efficient (i.e., take less than 30 min for teachers and/or parents to complete; Powers). The meeting should be documented by a notetaker and minutes from the meeting should be disseminated to all team members and other key stakeholders (e.g., parents, administrators) shortly after the meeting. Follow-up between key staff implementing action steps should occur after meetings and between meetings and should include face-to-face verbal contact and written communication. Subsequent meetings

should be scheduled regularly according to the team's predetermined schedule to review what was completed and evaluate student progress (Aksamit & Rankin, 1993; Bahr et al., 1999). Procedures for who is following up, how, and by when should be outlined as part of the team processes and as decisions are made.

Systematic Problem-Solving Process

Successful teams use a systematic problem-solving process that emphasizes data-based decision-making and evidence-based interventions (Doll et al., 2005; Powers, 2001). These same principles of practice are major components of increasingly implemented and empirically evaluated, multi-tiered frameworks such as Response to Intervention and Positive Behavioral Interventions and Supports (see National Center on Response to Intervention, 2013 and Sugai, 2007 for a review). In addition, teams that have a problem-solving process are more satisfied and are successful in generating useful, step-by-step intervention plans (Chalfant and Pysh, 1989; Safran & Safran, 1996).

Researchers have identified a number of suggested best practices to make team problem-solving the most effective. For example, teams should have standardized procedures (Whitten & Dieker, 1995), emphasize problem-solving rather than problem identification (Burns et al., 2005), be efficient with their time (Doll et al., 2005), define problems in measurable terms (Safran & Safran, 1996), and explore multiple options (Etscheidt & Knestling, 2007). The problem-solving process should include activities that support implementation, monitor fidelity of implementation, and evaluate the success of the intervention (Powers, 2001; Nellis, 2012). Additional best practices focus on the use of data to inform the problem-solving process, including collecting data up front and on an ongoing basis (Aksamit & Rankin, 1993; Kovaleski et al., 1999), using teacher judgment in conjunction with objective data (Bahr et al., 1999), integrating data from individual students or small groups with systemic data (Burns et al., 2008), and collecting data before and after interventions (Safran & Safran, 1996).

Professional Development

For school team members, educators, and SMH professionals who have experienced limited genuine collaboration, training in "teamwork knowledge" or "teamwork competencies" can lead to increased team effectiveness (Weaver, Rosen, Salas, Baum, & King, 2010). Although most professional development is provided in one-shot training sessions, research suggests that ongoing and job-embedded professional development is more effective for fostering long-term skill development (Borko, 2004). While professional development may cover a variety of topics depending on the team's purpose, best practice research highlights three overarching training areas that can enhance team functioning:

Data-Based Decision-Making

While much has been written about the importance of making decisions regarding needs and goal identification, progress monitoring, and continual improvement that are based on credible and reliable data, these processes are not often part of team members' educational backgrounds (Ronka, Lachat, Slaughter, & Meltzer, 2008). Therefore, training is needed in identifying the appropriate data to collect, designing valid and reliable tools for collecting data, analyzing the data, interpreting the data, and feeding the data back into the decision-making process (Maras, 2008).

Sharing Practice

Examining student data can threaten educators' identities (Hymans, 2008). If data reveals that some students are not making progress, educators' may feel that this reflects poorly on them and that the data analysis process is intended to cast doubt on their effectiveness as an educator. Therefore, when investigating the cause of student struggles with learning, it is important to train team members in productive communication skills that foster critical discourse (Musanti & Pence, 2010). In addition, sharing practice means that educators are not the only team members open to sharing; equally, SMH professionals must be willing to discuss their data and practice with students. This necessitates cross-disciplinary training related to differences in language,

professional goals, and educational backgrounds (Weist et al., 2012).

Evaluating Team Progress and Effectiveness

As goal monitoring and process evaluation are linked with better team outcomes (Powers, 2001), training and consultation should be provided to school teams so that members may analyze progress, correct missteps, and put in place mechanisms for team improvement (Burns et al., 2005). Using a checklist and ongoing feedback can help teams adhere to a systematic problem-solving process and may fuel constant and continuing efforts to improve their process (Bartel & Mortenson, 2006). For example, Burns and colleagues (2008) provide a 20-item checklist teams can use to evaluate both the integrity with which an intervention or plan was implemented as well as the team's process.

Limitations of Best Practices

Despite the bevy of recommendations regarding interdisciplinary teaming in schools, the sheer number and variety of sources of these recommendations can make it difficult for teams to identify, adopt, and implement these strategies. Therefore, a set of recommendations that is parsimonious, easily understandable, and easily accessible is necessary to improve the functioning of school teams. In the next section we describe one systematic problem-solving process that teams could use to strengthen their team and provide effective services for students.

The Getting to Outcomes (GTO) Framework

Overview of GTO

Getting to Outcomes (GTO)[1] is a 10-step cyclical framework school teams can use to organize the problem-solving process and ensure that they will achieve their desired outcomes (see Figure GTO—painter's pallet; Wandersman et al., 1999, 2000). The original GTO manual was developed to support community substance abuse prevention among youth and is available free of charge (http://www.rand.org/pubs/technical_reports/TR101.html). However, the 10-step GTO process has been applied to a variety of content areas in diverse settings. For example, the GTO process has been used to develop manuals for Teen Pregnancy and Sexually Transmitted Disease Prevention (Lesesne et al., 2008), promoting Developmental Assets (Fisher, Imm, Chinman, & Wandersman, 2006) and Systems of Care for children's mental health (Levison-Johnson, Dewey, & Wandersman, 2009). An emerging research base extols the benefits of using GTO to plan, implement, and evaluate interventions (Chinman et al., 2005; Flaspohler, Meehan, Maras, & Keller, 2012) (Fig. 1).

GTO includes steps for planning, implementation, and evaluation in order to ensure that quality results are obtained. The first six steps of GTO include accountability questions to guide a systematic planning process to optimize the potential for successful implementation and positive outcomes. These steps include assessing current needs and resources (Step 1: Needs and Resources Assessment) and articulating a clear and measurable goal (i.e., a specific, measurable, attainable, relevant, and timely "SMART" goal) (Step 2: Goals). The next steps focus on exploring and selecting a best practice (Step 3: Best Practices), ensuring that the practice fits with the local culture and context (Step 4: Fit), and assessing if the local context has the necessary capacities (e.g., time, money, space, trained personnel) to implement the practice with fidelity (Step 5: Capacity). Using data collected across each of these steps, the user then develops a plan for implementing and evaluating the practice (Step 6: Plan). The last four steps of GTO focus on evaluation and improvement. These steps include monitoring fidelity of implementation (Step 7: Process Evaluation), assessing the impact of the selected best practice (Step 8: Outcome Evaluation), and using those data in conjunction with other data to evaluate the effectiveness of the practice and identify areas of improvement

[1]Getting to Outcomes and GTO are trademarks registered by the University of South Carolina and RAND (Wandersman, Imm, Chinman, & Kaftarian, 1999, 2000).

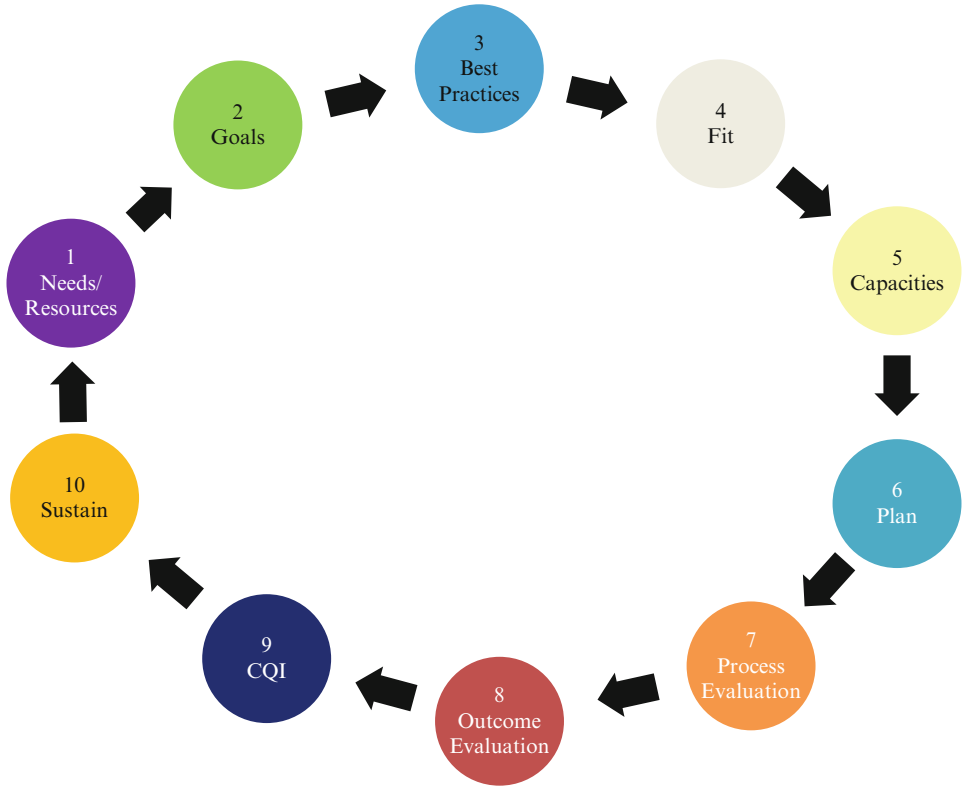

Fig. 1 *GTO.* Getting to outcomes®: 10 steps for achieving results-based accountability

(Step 9: Continuous Quality Improvement). Finally, the user addresses the issue of sustainability by first determining if the practice should continue to be implemented and, if so, how quality implementation should be sustained over time by continued monitoring and continuous quality improvement (Step 10: Sustain).

The next sections describe how interdisciplinary school teams could use GTO as a systematic decision-making process to facilitate effective service provision by applying GTO to various levels of student interventions and their team process. Table 1 includes team-specific questions for each step of GTO that teams may find useful when reflecting on their effectiveness and efficiency. The utility of GTO as a problem-solving process lies in its use as a way to work systematically through a particular issue related to a student, group, classroom, or school as well as its use as a tool to guide team consideration of overall group functioning.

Application of GTO to School Teams

As many schools are integrating their problem-solving teams into school-wide, tiered models of prevention and intervention (e.g., universal, secondary, tertiary; Horner, Sugai, & Anderson, 2010), SMH professionals are becoming increasingly involved with both systems (universal) and intervention (secondary and tertiary) teams. This section provides examples of how school teams can use GTO to provide quality service delivery across both types of teams.

At the universal level, problem-solving teams can use GTO to develop, implement, and evaluate a school-wide strategy for teaching and promoting behavioral expectations. For example, the team could identify common behavior problems and frequent areas of concern (e.g., hallway, gym) from previous behavior referral data (Step 1: Needs and Resource Assessment). In step two, the team could use the behavior referral data to

Table 1 Team practices and processes evaluation questions

GTO step	Questions teams could ask regarding the prevention and intervention practices they implement	Question teams could ask regarding their own practices, processes, and procedures
1. Needs and resource assessment	Did we accurately assess the needs across all sources of data in the school and community? Did we have a complete understanding of the need before we moved forward in the process? Did we assess and use all available resources? Did we duplicate resources? Could we have used our resources more effectively?	Did we thoroughly evaluate our needs and resources as a team, such as administrator support, teacher buy-in, and defined membership roles?
2. Goal(s)	Did we articulate a "SMART" goal (specific, measurable, attainable, relevant, timely)? Did we identify too many goals? Does our goal fully capture what we intended to accomplish?	Did we establish a clearly articulated and operationalized purpose and vision for our team?
3. Best practices	Did we sufficiently explore available best practices before selecting an intervention? Did we seek out input on best practices from local experts as well as researchers? Is there any evidence that the best practice we selected has been successful before?	Did we explore and include best practices when developing procedures for our team? Did we look at evidence of effective teaming practices from other team experiences in the school?
4. Fit	Did we discuss how the best practice we selected fits with the local culture/context? Is the best practice recommended for use in this context or with this population? Does evidence supporting the use of this best practice apply to our context and our specific uses?	Did we discuss how the best practices in teaming fit with the purpose of our team? Did we identify best practices in teaming that fit with the values of our team members, administrators, and colleagues?
5. Capacity	Did we have appropriate time, funding, and space to implement the best practice? Did we consider and address staff training/technical assistance needs?	Did we evaluate whether or not we, as team members, had the skills needed to implement the best practices in teaming we identified to implement? Did we obtain any training/technical assistance we needed to implement our best practice teaming procedures with fidelity?
6. Plan	Did we develop a specific plan for implementing the best practice? Does the plan articulate who will receive the best practice (including when, where, how, and how much)? Did our plan provide enough information to monitor implementation?	Did we clearly articulate a plan for implementing the best practice teaming procedures? Did the plan identify who on the team was responsible for what, when, and how?
7. Process evaluation	Did we use our plan to monitor implementation of the best practice? Did we track the necessary information to evaluate fidelity and dosage of the best practice?	Did we compare what we actually did to our plan for implementing best practices in teaming? Did we collect the information necessary to evaluate how well we followed our plan?
8. Outcome evaluation	Did we use our goals to guide our outcome evaluation? Did we select appropriate and rigorous methods to determine if our intervention was effective? Did we use process evaluation data to consider how effective the intervention was across students/implementers/contexts?	Did we collect sufficient data to evaluate progress toward our team purpose and goals? Did we evaluate data collected to determine how effective we were as a team?
9. CQI (Continuous Quality Improvement)	Did we document each of our actions in steps 1–8 in order to identify areas needing improvement? Did we consider students' successes and challenges throughout the prevention and intervention process? Did we develop ideas for improvement that are specific to the scenario(s) at hand?	Did we use data from steps 1–8 to evaluate our overall success as a team? Did we consider our successes and challenges as team? Did we develop ideas for how our team can be more effective and efficient in general?
10. Sustain	Did we use data from steps 1–8 to determine if we should continue to implement this intervention? If so, how will we sustain high-quality implementation of the intervention?	Did we discuss how we can sustain the successes of our team overall?

develop a measurable goal for reducing behavior problems and discipline referrals (Step 2: Goal) and draw from best practices in behavioral interventions to identify relevant strategies (Step 3: Best Practices). For example, if data indicated that referrals for peer altercations increased in April, the team may set a goal for reducing peer altercations by 30 % in April in step two and then, in step three, decide to increase the length and number of classroom social skill lessons from a previously acquired, evidence-based practice in March and April. In order to implement this strategy, the team would need to evaluate how well the strategy fit with the culture of the school (Step 4: Fit) and existing resources (e.g., classroom time) (Step 5: Capacity). For example, if feedback from teachers indicated that they were dissatisfied with the previous year's classroom lessons, the team may need to revise the lessons before asking teachers to implement the lessons more frequently. Based on the team's considerations in steps four and five, they could then develop an implementation plan to identify the "who, what, when, where, and how" (Step 6: Plan). This planning can help the team remember they need to monitor implementation of the new plan (Step 7: Process Evaluation) and changes in behavior referrals (Step 8: Outcome Evaluation).

As the plan is implemented, the team could review the evaluation data to determine how the intervention is working and can be improved (Step 9: CQI). They could also review their progress according to the GTO checklist in Table 1. For example, the data may indicate that behavior referrals only decreased by 15 % during the month of April and most came from new teachers and/or a small group of students. The team may also review their planning and implementation steps. Because the team was systematic in going through each step and documenting their processes and decisions, they can easily look back using the checklist provided in Table 1 to identify what went well and what needs improvement. As an example, the team may look back at Step 5: Capacity (e.g., Did we consider and address staff training/technical assistance needs?) and realize that they did not make a plan for teaching new teachers to effectively deliver the behavioral expectation lessons in their classrooms. In order to improve and sustain the plan over time, the team could then develop a plan for building the capacity of the new teachers before implementing the plan again next school year. The team may also look back at Step 1: Needs and Resource Assessment (Did we have a complete understanding of the need before we moved forward in the process?) and realize that most of the behavior problems due to peer altercations were caused by a small group of students who need more targeted intervention. As a result, the team may refer the students to the school's Intervention Assistance Team for follow-up.

When the Intervention Assistance Team gets the referral, the team could also use the steps of GTO to systematically plan, implement, and evaluate a targeted Tier 2 intervention. For example, the team could collect additional data from the students' families and teachers regarding academic performance, social-emotional behavior, and risk/protective factors (Step 1: Needs and Resource Assessment). Based on what they learn, the team may set a goal of reducing the students' peer altercations by 35 % across the entire school year (Step 2: Goal). The team may then turn to the SMH team member to tell them about best practices in small group intervention to teach positive social skills and reduce negative interactions (Step 3: Best Practices). Based upon this review, the team may decide to ask the SMH team member to provide a small group counseling intervention using an evidence-based, manualized social skill intervention such as Skill Streaming (McGinnis, 2011). The team would then evaluate the degree to which Skill Streaming fits the students and school's cultures (Step 4: Fit) and the capacity of the SMH team member to deliver the intervention (Step 5: Capacity). The team could develop an implementation and evaluation plan (Step 6: Plan) including when the counseling group will occur, how often, how long, where, as well as what data will be collected to evaluate fidelity of implementation (Step 7: Process Evaluation) and outcomes (Step 8: Outcome Evaluation). Following implementation, the team could reconvene to review the process and outcome evaluation data and determine

if additional supports are needed (Step 9: CQI) and how the intervention will be continued, if indicated (Step 10: Sustain).

Next Steps for School Teams

Thus far, we have discussed quite a number of recommendations for school teams. In this section, we consolidate the teaming literature to provide take-home tips and strategies that both researchers and practitioners can use to get started improving school teams.

Guidelines for Researchers

While some studies have evaluated common teaming practices in schools, few studies have used rigorous evaluation methods. Thus, a significant gap exists between the lack of evidence-base for teaming practices in schools and the proliferating use of teams across school initiatives. In order to maximize the effectiveness of teams in schools, there are several steps researchers interested in the establishment and maintenance of effective school teams should consider, including more systematically evaluating the effectiveness of commonly recommended practices in teaming and evaluating the education and mental health field's capacity to engage in best practice processes such as GTO at both the system and school levels.

One area pertinent to capacity is the quality of preservice training (Weaver et al., 2010). Researchers should assess preservice training standards and available training opportunities to determine if they encompass the competencies necessary to implement best practices processes and interdisciplinary collaboration. If current training models are found to be inadequate, researchers should take efforts to develop and disseminate effective training models for building competency in general capacities, macro-level evaluation, best practice processes such as GTO, and interdisciplinary collaboration. Finally, researchers and trainers should work to provide more in-depth and ongoing training experiences that are job-embedded in order to continuously maintain and improve team members' collaborative skills (Papa, Rector, & Stone, 1998).

Guidelines for Practitioners

Areas that practitioners can turn their immediate attention to include reflecting on their team's processes, addressing areas of weakness, and identifying existing data that can be used by their team. Teams can use the guiding questions provided in Table 1 to help them reflect on their processes at each step of a problem-solving process. For example, teams may review their funding needs and determine how they will continue to secure funding over the long term well before funding runs out (Step 10: Sustain). Team members may also encourage critical reflection using existing data in order to foster a spirit of CQI in the school and identify areas in which they need to collect new data to accurately evaluate their effectiveness (Step 7: Process Evaluation; Step 8: Outcome Evaluation; Step 9: CQI). Team members with expertise relevant to a particular team endeavor should educate other members on best practices and provide related literature (Step 3: Best Practices) so that the team can discuss which practices may be the best fit for their school and desired outcomes (Step 4: Fit). Specifically, teams can discuss how well each potential best practice may work for the student population, community demographics, and the values of school and community stakeholders. In addition, teams should make efforts to work closely with administrators to jointly identify gaps in capacity and identify feasible processes for building and maintaining capacity (Step 5: Capacity). Further, team members should ask administrators and other leaders how programs are working and what information they use to determine how programs are working. If there is no accountability system in place, teams should strongly advocate for such a system or develop one on their own. To help build the team's collaborative and evaluation skills, teams should consider seeking professional development and technical assistance in collecting needs and resource assessment data

and evaluating programs and practices. Many colleges, universities, and extension offices have valuable evaluation resources such as the University of Kansas' Community Toolbox and the University of South Carolina's Getting to Outcomes tools (both mentioned above).

Whenever possible, school team members should use existing data to make decisions (Splett & Maras, 2011). Data can be used to accomplish a number of essential team tasks such as identifying needs and resources, setting goals, and evaluating programs (Powers, 2001). As a general rule of thumb, team members should always be on the lookout for useful data that is being collected, but not being used. If there are research initiatives being conducted in the school, team members should attempt to make ties with these individuals and ask them to share any findings that might be useful for the team's purposes.

Conclusion and Future Directions

While teams are common in schools, there is comparably little research to guide team functioning and provide teams with the tools and training they need to accomplish their desired goals. In this chapter, we have provided a review of best practices for school teams as identified in the teaming literature and have proposed a model for team functioning (GTO) that can be used to ensure quality service implementation and sustainability. While we are hopeful that teams are able to benefit from the information in this chapter, we recognize the fact that very few school teams currently incorporate these types of procedures into their routine practices (Truscott et al., 2005). Thus, there is still work to be done to bridge the gap between science and practice in order to make evidence-based team functioning a reality. This limitation underscores the need for researchers and practitioners who are knowledgeable about these evidence-based practices to advocate for their widespread adoption at the district, sate, and federal levels. If the use of evidence-based teaming practices is mandated and becomes the norm, the availability of team resources is likely to increase and team accountability is likely to be enhanced.

In the meantime, research efforts must focus on increasing districts' and schools' capacities for establishing effective teams. Particularly, research demonstrating that effective teaming is tied to positive student outcomes is likely to increase buy-in among SMH professionals, teachers, administrators, students, and community members. Additionally, more research is needed to refine and operationalize best practices for teams working in schools so that teams can easily use these recommendations to bolster their efforts. Finally, the development and dissemination of effective preservice training models for building competency in general capacities, macro-level evaluation, best practice processes such as GTO, and interdisciplinary collaboration is needed to provide team members with the skills to effectively contribute to the attainment of team goals. Through continued reflection and research, we can maximize the effectiveness of teams and achieve the prevention and intervention outcomes we desire.

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Advancing School Mental Health in Montana: Partnership, Research, and Policy

Erin Butts, Sara Casey, and Carol Ewen

Introduction

Montana consists primarily of "frontier" areas (less than seven persons per square mile), extreme geographic isolation, and few metropolitan zones. Montana ranks first in the nation for suicide and fourth for adolescent drinking rates (Health, 2006). Research suggests that rates of emotional/behavioral problems are similar for youth located in urban and rural areas, yet youth in rural areas tend to lack access to mental health treatment (Substance Abuse and Mental Health Services Administration [SAMHSA], 2012). Montana was an early pioneer in implementing school mental health (SMH) to allow rural youth better access to mental health services (Farmer, Stangl, Burns, Costello, & Angold, 1999).

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Nationally, SMH is one of the fastest growing professional fields for mental health workers and public school systems. Montana's SMH program Comprehensive School and Community Treatment (CSCT) is no exception. CSCT exists as an "intense service designed for youth who are in immediate danger of out-of-home placement and/or exclusion from school or community," providing a "comprehensive, planned course of outpatient treatment…to a child with a serious emotional disturbance (SED)" (Montana Department of Public Health and Human Services, 2003, p. 2.6). The evolution of CSCT provides a context to look at the interplay of partnership, research, and policy, three realms impacting the advancement of SMH practices in Montana.

In 2010, Montana's Department of Public Health and Human Services (DPHHS) and the Office of Public Instruction (OPI) employed a researcher to write a white paper on effective school mental health practices. Through this collaborative research project and the subsequent white paper (described in the following), state and local leaders began to advance the Trilateral Framework: Partnership, Research, and Policy as an effective tool for building school mental health agenda in Montana.

History of Montana's School Mental Health Services

CSCT began from a school day-treatment model provided by four Montana Regional Mental Health Centers, which originated in 1997. In day-

M.D. Weist et al. (eds.), *Handbook of School Mental Health: Research, Training, Practice, and Policy*, Issues in Clinical Child Psychology, DOI 10.1007/978-1-4614-7624-5_6,

Old Approaches	New Approaches
• Each school works out their own plan for involving community mental health (MH) staff • One community MH clinician is housed in a school building 1 day a week to "see" students • The clinician does not participate in school teams and operates in relative isolation • No data are used to decide on or to monitor interventions • There is no systematic evaluation, instead "intuitive" monitoring of efforts.	• District has a plan shaped by diverse stakeholders for promotion of learning, positive behavior and mental health for students, and a "shared agenda" is real in individual schools, with staff from education, mental health and other child serving systems working closely together and with youth and families for developing and continuously improving programs and services at all 3 tiers, based on community data as well as school data. • There is "symmetry" in leadership among staff from education and mental health systems in leading and facilitating activities at all three tiers • Personnel from MH agency assists school district clinicians with facilitating some Tier 2 and Tier 3 interventions including some small group interventions, function-based behavior plans and wraparound teams/plans

Fig. 1 Barrett, Eber, Weist proposed new approaches to SMH

treatment, schools provided a work space and teacher to serve up to 12 students. Regional Mental Health Centers staffed a licensed therapist and non-licensed behavior consultant in the classrooms to work with students diagnosed with a serious emotional disturbance (SED). Although students were provided educational and mental health services, the Regional Mental Health Center model denied students access to the general curriculum and consequently excluded them from their peers. Furthermore, school day-treatment was provided in major urban areas leaving rural youth with little or no access to mental health services.

In 1998, DPHHS offered Regional Mental Health Centers, a state waiver to pilot SMH services. Moving from an isolated day-treatment model to an inclusive service delivery model propelled Montana down the path to improve services for children and their families. The change in service delivery required schools and mental health workers to rethink their roles in the provision of SMH.

Barrett, Eber, and Weist (2009) argue for new approaches towards comprehensive SMH integration in their document *Development of an Interconnected Systems Framework for School Mental Health.* Montana began initial implementation of this work 10 years earlier. Figure 1 shows the contrast between old approaches to SMH practice to new approaches.

Following the waiver project, SMH was written into State Administrative Rule. "Administrative rules are agency regulations, standards or statements of applicability that implement, interpret, or set law or policy" (Hergert, 2012). The state disbanded its Regional Mental Health Center model and allowed a variety of providers to bill for Medicaid services. Consequently, SMH expanded into rural communities, increasing families' access to mental health services. Ultimately, the popularity and growth of SMH strained the state budget, requiring DPHHS to remove SMH as a billable service despite protests from the education and mental health communities. In 2002, agencies were forced to lay off staff and cut services to qualified youth, while schools were burdened with continuing services for large caseloads of youth with inadequate, untrained staff. At this point, Montana state policy failed the youth in the system, diminishing the trust and partnership between mental health agencies, other youth-serving organizations and the state. Because research and partnership were not the foundation for policy decision making, State Administrative Rule did not effectively address the needs of children and their families.

Within a year of cutting SMH, OPI explored avenues to increase access to Medicaid funds and approached DPHHS with the idea of creating a blended service model funded jointly through

education and public health dollars. In 2003, the OPI, DPHHS, and mental health agency representatives set aside differences to work collaboratively and develop a system that supported a consistent, blended funding stream for effective service delivery and consistent access to services in rural communities. Although collaborative partnerships informed state policy at this juncture, research was not yet being used to drive policy. In 2003, SMH was once again incorporated into Administrative Rule, this time named Comprehensive School and Community Treatment (CSCT).

Although partnerships were key in bringing CSCT to Montana, research was not utilized resulting in vaguely described services and no program evaluation system. The state did provide a contract template for schools to use to obtain CSCT services that addressed legal and financial issues; however, program descriptions and requirements were left up to each district. Schools lacked the expertise and support to write in service delivery provisions. Consequently, CSCT services were determined by mental health personnel and agency policy rather than evidence-based practices for school mental health delivery.

When writing the Administrative Rule for CSCT in 2003, the state provided a contract template for schools wanting to obtain CSCT services. This template addresses legal and financial concerns. Program descriptions and requirements were left up to each district, and the template was never intended to be used as a generalized tool for all Montana public schools. The generalized use of the contract is an unintended consequence and an area receiving more attention in the new Administrative Rule rewrite process today, with the expectation of more focus and attention on helping school districts better individualize their own mental health needs and expected outcomes.

Demographics

Montana's unique geographic size and demographic makeup create challenges to advancing school mental health, owing to the rural composition of many public school districts that exist across sizeable distances. When considering CSCT Administrative Rules, it is important to note the following characteristics: Montana's racial composition is 89.4 % white, 6.3 % American Indian, 2.9 % Hispanic, 0.6 % Asian, 0.4 % Black, 0.1 % Pacific Islander, and 0.6 % others (Montana Office of Public Instruction, 2011). In 2011, Montana had a total of 421public school districts encompassing 827 schools (2011).

The large number of school districts, each with an independent administration and educational philosophy, makes managing CSCT programs a significant task. Individual school buildings have administrators with varied backgrounds and philosophies on the role of mental health in schools, so programs look different from one school to the next. Additionally, recruiting and retaining professionals to work in rural areas is difficult and can put mental health agencies in a position of having to hire inexperienced staff who lack postsecondary training. Furthermore, providing clinical supervision, skill building, ongoing training opportunities, and support to staff in remote areas is trying and contributes to high employee turnover, consequently creating a wide variation in service delivery and practice.

Despite the challenges created by remote and sparsely populated areas, Montana has been successful in growing CSCT programs and placing mental health services in rural communities across the state (Fig. 2). In 2003, 13 schools and two subcontracting entities participated in CSCT services. In the 2010–2011 academic year, CSCT increased to nine subcontracting entities with a total of 256 schools and 96 school districts receiving the service. In the past 4 years, CSCT grew by 34 %, making up 32.8 % of total Medicaid mental health billing for youth (Bureau, 2011). Research should inform revision of Administrative Rules due to the financial breadth of CSCT in Montana.

Figure 2 shows CSCT contract awards by school district from the 2008 academic year (AY) to the present. From AY 2008–2009 to AY 2011–2012, the total number of school contracts for CSCT increased by 65, a 34 % rate of change. The increasing trend of mental health providers in school districts has resulted in CSCT serving

Academic Year	Schools Districts Contracting CSCT Providers	School Contracting CSCT Providers
2008-2009	80	191
2009-2010	80	194
2010-2011	84	212
2011-2012	96	256

Fig. 2 Comprehensive schools and community treatment contracts, by academic year (Bennetts, 2011)

more children and represents a large portion of Montana's Medicaid billing for children's mental health services. As one of many Medicaid-supported programs, stakeholders recognize the need for research-based decisions to improve outcomes for youth and substantiate spending (Bennetts, 2011).

Montana's Trilateral Framework: Partnership, Research, and Policy

Because CSCT services had such wide variation with no data to suggest program efficacy, Montana saw the need to systematically analyze SMH provision. Montana is currently in the process of developing policy that articulates the use of evidence-based practices, family and community involvement, and quality improvement. The trilateral partnership, research, and policy model (Fig. 3) demonstrates how the three components are essential in the development of effective services for students, offering opportunities to share scarce resources and provide a continuum of supports. Montana partners and researchers involved in the spectrum of intervention to policy have found this model to be a useful and practical way of organizing statewide systems change in a productive and collaborative manner.

Underpinning the trilateral framework in Fig. 3 is the idea that to create effective mental health delivery systems, states must use collaborative partnerships and research to inform policymaking. Partnership fosters accountability and efficient use of resources and builds consensus towards implementing best practices. Each of

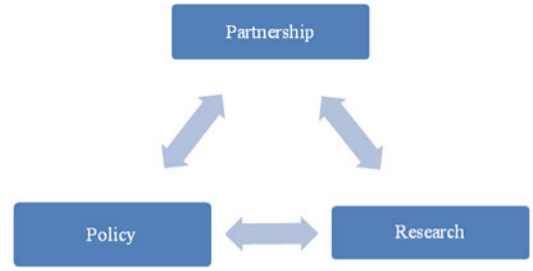

Fig. 3 Montana's trilateral framework: partnership, research, and policy

these three realms continuously impacts each other creating a cycle where sound policy promotes strong partnerships resulting in research-informed intervention delivery and improved outcomes. Alternatively, partnerships help shape effective policy and the subsequent implementation, while research impacts policy development and informs partnerships. This model promotes diverse systems working together to break down the "siloed" approach to delivering services. Individually one part is not more important than the others; rather, all three are essential to cohesive multisystems change in individual and school-level practices.

Although CSCT services were provided in a school context, Montana recognized that the siloes between mental health systems and school systems still existed. This resulting gap from a siloed approach is not unique to Montana. Kutash, Duchnowski, and Lynn (2006) write about gaps existing between research in education and research in mental health, "with neither citing each other's work." The authors continue that "[t]here are bridges to build here" between research and implementation (p. 6). Fortunately for Montana, developing strong partnerships is part of the state's social heritage. The frontier mentality of helping one's neighbor promotes collaborative teaming and support.

Partnership

In Montana where "everybody knows most everybody," there is a high degree of collegiality

between university personnel, community professionals, and state department staff. Montana's small population and scarce resources create conditions where collaborative partnerships are vital to service provision. It was through interdisciplinary collaboration that two Montana government agencies, DPHHS and OPI, partnered to articulate a shared agenda – the desire to use research to inform policy in developing mental health programs and services in the schools. Both state systems directly impact policy and, thus, the quality of service delivery across Montana. DPHHS and the OPI leaders are increasingly making efforts to align services that will complement and build on financial and personnel resources and employ research to drive policy that promotes best practice.

Researchers Andis and colleagues (2002) discuss the importance of developing a shared agenda among professional organizations, policy leaders, and families. They write, "experience has shown that much of the misunderstanding and discord that occurs among different child-serving agencies arises from erroneous assumptions and beliefs about the mission and goals of the other agencies, and the legal and funding mandates that help drive an agency's agenda in meeting the needs of the children and young people" (p. 30).

Collaboration

Developing collaborative interdisciplinary partnerships is central to reaching Montana's ambitious goal to require and support evidence-based practice within CSCT. These partnerships create bridges for communication that engage key stakeholders in identifying and supporting best practices and increase provider buy-in for implementation, resource sharing, and efficient service delivery and outcomes.

Bronstein (2003) presents a model of interdisciplinary collaboration for social workers that aligns with Montana's notion of partnership, representing "optimum collaboration between social workers and other professionals" (p. 297). Bronstein presents five core components to interprofessional processes: (1) interdependence, (2) newly created professional activities, (3) flexibility, (4) collective ownership of goals, and (5) reflection on process. Bronstein describes interdependence as referring to:

> the occurrence of and reliance on interactions among professionals, whereby each is dependent on the other to accomplish his or her goals and tasks. To function interdependently, professionals must have a clear understanding of the distinction between their own and their collaborating professionals' roles and use them appropriately. (2003, p. 299)

Through collaborative interdisciplinary partnerships, Montana's mental health and education professionals are developing common language and a shared vision to improve expanded SMH services and outcomes. Montana recognizes that policy sets service delivery expectations and holds providers accountable. Therefore, it is important that all State Administrative Rules provide consistent expectations for all providers and professionals.

Moving Forward

In the fall of 2009 through the summer of 2010, Montana focused again on building collaborative relationships. During this time, the state began conversations about how to intentionally work together, across disciplines, as partners in advancing SMH. Montana formed an informal state level SMH workgroup with partners from the OPI, including representation from the statewide Positive Behavioral Interventions and Supports (PBIS) network (referred to as the Montana Behavior Initiative), Special Education, Health Enhancement, and partners from DPHHS, including Children's Mental Health, Medicaid, and Head Start. With guidance and active support from national SMH leaders, this group's effort resulted in the planning of the first statewide School Mental Health Conference that brought stakeholders to the table to start a conversation about mental health in the Montana public school system.

Stakeholders at the inaugural meeting held in January 2010 identified a number of recom-

Table 1 Stakeholder recommendations (January 2010) and subsequent progress (January 2010–present)

Stakeholder recommendations	Actions taken following conference
Engage champions	
Maximize roles and interdisciplinary collaboration	The SMH workgroup formalized, agreeing to meet monthly at a regular date and time to discuss school mental health in Montana and collaboratively plan subsequent conferences. Representatives from CSCT licensed mental health centers adopted regular meeting times to share best practices, concerns and experiences
	Montana's statewide Community of Practice (CoP) originated.
Social marketing to promote youth and family voice	A partnership between Youth MOVE Montana and the CoP emerged. With COP support, Youth MOVE created and published a toolkit educating adults about how to support Montana youth with mental health concerns
Integrate SMH and PBIS initiatives	A school mental health strand was reinforced at the largest educational conference in the state, the Montana Behavioral Initiative (MBI) Summer Institute
Expand university partnerships	University of Montana Institute for Educational Research and Service partners provide grant writing support, participation in CoP webinars, and provided in-kind office space to researcher
Support demonstration sites to advance practices	School districts were selected to begin connecting SMH and PBIS supported by the Interconnected Systems Framework
Pursue grant opportunities	The OPI wrote and received a grant from the Mental Health Settlement Trust to implement high-fidelity wraparound services in three turnaround school districts on the Crow, Northern Cheyenne, and Fort Peck reservations
Focus on outcome data	*Outcomes and evaluation* is identified in the white paper as one of the nine pillars for expanding school mental health (CSCT) in Montana
Conduct resource mapping activities	Planned for Fall 2012, locally in Missoula and with the systems of care statewide committee
Research rural SMH strategies	Planned for forthcoming statewide SMH conferences

mendations that propelled the work forward. The following Table 1 explains the collaboratively developed recommendations as well as the resulting actions.

It was the strengthened partnerships between stakeholders reflected in the recommendations and subsequent work identified in Table 1 that accelerated the pace of change in the time following the first conference. Furthermore, the increased communication and collaboration among stakeholders readied the field for the introduction of research-based decision making.

In 2010, the OPI employed a researcher with experience and knowledge of child and adolescent and school mental health issues and programs in the state to write a white paper on SMH. The purpose of the white paper was to research and inform the state of Montana on SMH best practices and guide DPHHS in the revision of Montana's CSCT Administrative Rules, starting in 2011. The white paper titled *Advancing School Mental Health in Montana: A Report on Changes to Administrative Rules for Comprehensive School and Community Treatment* (Butts, 2010) was submitted to the OPI in December 2010.

Research

The final white paper presents a series of evidence-based recommendations to specifically fit within the context of Montana's CSCT program and the corresponding Administrative Rules. It is a working manuscript for stakeholders and policy makers intended to guide the change process ensuring alignment with research. Figure 4 exhibits the research methodologies used to underscore the development of the research paper.

The accelerated national growth in research on improving SMH increased Montana state partners' knowledge and resources for developing new CSCT Administrative Rules. National researchers were willing to provide free resources and consistent involvement of their time to assist the state of Montana in advancing SMH. Information gathered is now foundational for rule

Fig. 4 Research methodologies to inform white paper

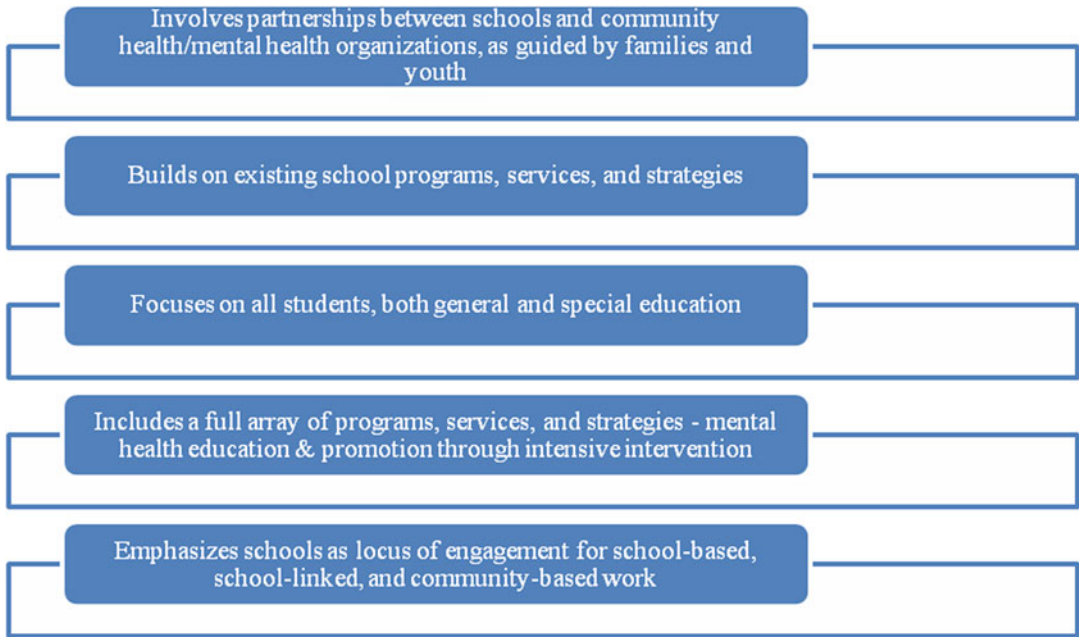

Fig. 5 Definition of school mental health (Weist & Paternite, 2006)

revision. Research outcomes included a common SMH definition (Fig. 5) and Principles for Expanded School Mental Health (ESMH) (Fig. 6), elaborated in the following.

Though there are many definitions of SMH, common themes and concepts reoccur. Weist and Paternite (2006) present a comprehensive definition incorporating key concepts. Figure 5 summarizes this definition.

Building on the above definition are systematic quality assessment and improvement (QAI) frameworks for SMH. "The failure to advance systemic quality assessment and improvement (QAI) frameworks in [School Mental Health],"

Detailed Principle	Section V Subheading
All youth and families are able to access appropriate care regardless of their ability to pay	Prevention & Early Intervention
Programs are implemented to address needs and strengthen assets for students, families, schools, and communities	Family-School-Community; Training; Evidence-Based Practice
Programs and services focus on reducing barriers to development and learning, are student and family friendly, and are based on evidence of positive impact	Outcomes & Evaluation
Students, families, teachers and other important groups are actively involved in the program's development, oversight, evaluation, and continuous improvement	Outcomes & Evaluation; Family-School-Community
Quality assessment and improvement activities continually guide and provide feedback to the program	Outcomes & Evaluation
A continuum of care is provided, including school-wide mental health promotion, early intervention and treatment	Promotion
Staff hold to high ethical standards, are committed to children, adolescents, and families, and display an energetic, flexible, responsive, and proactive style in delivering services	Evidence-Based Practice
Staff are respectful and competently address developmental, cultural, and personal differences among students, families, and staff	Supervision
Staff build and maintain strong relationships with other mental health and health providers and educators in the school, and a theme of interdisciplinary collaboration characterizes all efforts	Interdisciplinary Collaboration
Mental health programs in the school are coordinated with related programs in other community settings	Youth Leadership Opportunities

Fig. 6 Principles for expanded school mental health as applied to categories for CSCT administrative rule revision

argues Evans, Weist, and Serpell (2007), "contributes to a picture of poorly planned, implemented and evaluated services that are having superficial if any benefit" (p. 2).

Evans et al. (2007) argue that if QAI frameworks are not in place, the connection of training, practice, research, and policy into system transformation is less likely to occur. These system transformations themselves are "being called for by mental health, education, and other child serving systems" (Evans et al., 2007, p. 2).

Figure 6 reviews principles for high-quality and effective SMH programs from the University of Maryland, Center for School Mental Health (Weist et al., 2005, 2007). The first column of Fig. 6 shows the principles, and the second column shows the separate subheadings pertaining to categories of CSCT Administrative Rule revision.

Butts (2010) concluded that definitions of SMH, QAI frameworks, and research-based principles for expanded SMH all engender their own

Fig. 7 Nine pillars for expanded school mental health practice

complications but, when implemented together, promote coherent strategies for systems change and readiness. Abovementioned processes to guide the work in Montana and presented in Fig. 7 represent the core of the document and are major areas guiding practice. The nine pillars are:

In addition to synthesizing the research and presenting this framework for systems change, the white paper provides recommendations for specific actions to be taken in Montana. Recommendations are emphasized in a number of key realms related to Administrative Rules and better integrating Positive Behavior Intervention and Supports (PBIS) and SMH. Thus, the development of the white paper and associated processes helped to facilitate the development and implementation of the trilateral model for advancing SMH in Montana.

Policy

Weist and Paternite (2006) reason: "because states and local communities have significant latitude in decisions about policy and practice, the extent, type, and quality of services that are offered vary tremendously" (p. 177). The authors continue to highlight:

> The significant variability in policies and practices across child-serving systems within and between localities contributes to inertia in local and state governments in advancing reforms and improvements in these systems. Organization of state level initiatives that reform and improve child-serving systems is an important strategy to address existing variability in SMH policy and practice. (p. 177)

The white paper provided specific recommendations for advancing SMH for each of the nine pillars and also provides four individualized recommendations for the Process of Administrative Rule Changes: (1) *Include Stakeholders* (involve multiple stakeholders in CSCT Administrative Rule change process), (2) *Continue with Evaluation and Assessment of CSCT* (conduct a thorough evaluation of CSCT by implementing a quality assessment and improvement analysis), (3) *Increase the Use of Technology* (increase the use of technology for therapeutic services, professional development, and statewide collaboration), and (4) *Work Collectively* (all nine CSCT providers to begin working collectively to come up with a shared agenda, goals, and action strategies).

Policy makers and family organizations can develop and embrace a shared agenda in partner-

ship, with a "common conceptual framework that underpins a comprehensive approach to mental health services in schools: a seamless, fluid, interlinked multi-level framework that encompasses positive child and youth development, prevention, early intervention, and intensive interventions" (Andis et al., 2002, p. 31). In this regard, the white paper underscores the need for policies to support new practices that improve outcomes to Montana's children, youth, and families. Writing new CSCT rules is an opportune time to implement research to practice expectations for all CSCT licensed Mental Health Centers. However, within the rule changes, there needs to be enough flexibility for schools to have localized decision-making power. If new rules are written with such rigidity that individual schools or school districts and CSCT licensed mental health centers are unable to meet new standards, the effectiveness of CSCT will be compromised.

State officials acknowledge CSCT licensed mental health centers, and school districts can exert local control through school contracts for CSCT services. The contract has the potential to become a critical component and asset to support new research-informed CSCT Administrative Rule requirements and standards. The CSCT contract between licensed mental health centers and schools is receiving more attention during the current rule rewrite process. Policy makers are considering a more direct and supportive role in contract decision making. State officials may offer a sample contract that specifically outlines evidence-based practices. The white paper includes a sample contract from the state of West Virginia. West Virginia's sharing of resources will expedite sample contract development in Montana, consistent with a major theme in this book of working within the context of a Community of Practice, whereby states, communities, initiatives, and people share helpful resources and support one another through the foundation of collaborative relationships (Wenger, McDermott, & Snyder, 2002).

DPHHS administration upheld the research-founded tenet of having multiple stakeholders at the table when rewriting state CSCT Administrative Rules. The first CSCT Administrative Rule write in 2003 followed a typical process of political negotiation and did not reflect multiple stakeholders at the table. Following a specific recommendation in the white paper (Butts, 2010), DPHHS administration has taken ample time to put together a working group to rewrite the rules that is broader and more representative of those affected by CSCT. The following representation was specifically invited to constitute the working group to support the CSCT Administrative Rule revisions: OPI, one state agency staff in addition to a student, a parent, and up to three school staff representing school administrators and educators; DPHHS, four state agency staff representing Quality Assurance-licensure, Health Resources-acute services, Child Protection Services and Developmental Services-Children's Mental Health; Mental Health Centers, two staff representatives; and The University of Montana, one research representative and American Indian social services representation one individual.

Readiness

Holt, Armenakis, Field, and Harris (2007) looking at readiness for organizational change, and surveying more than 900 participants from public and private sectors, stated:

> Readiness for change is a multidimensional construct influenced by beliefs among employees that (a) they are capable of implementing a proposed change (i.e., change-specific efficacy), (b) the proposed change is appropriate for the organization (i.e., appropriateness), (c) the leaders are committed to the proposed change (i.e., management support), and (d) the proposed change is beneficial to organizational members (i.e., personal valence). (p. 232)

Montana state leaders exemplify best practices of effective decision making and moving towards statewide systems change. Multiple activities were set in place to assure state readiness for change. Table 2 provides a timeline of readiness activities to advance statewide CSCT rule revisions.

Table 2 Readiness activities towards statewide CSCT administrative rule revision

Timeframe	Readiness activity
December 2010	Final white paper to the OPI is submitted
January 2011	OPI, DPHHS, and IERS receive a formal presentation of the final white paper
February 2011	The OPI provided all participants at the statewide Communities of Practice a copy of the final white paper. This was the first release of the final document and an opportunity for public review of the research
March 2011	Presentation of the white paper at the statewide 2011 School Mental Health
April–May 2011	The nine CSCT licensed mental health centers met face to face with DPHHS administrators and researcher to discuss the nine pillars. CSCT licensed mental health centers invited DPPHS personnel and researcher to their Communities of Practice meeting to further discuss the nine pillars and talk about the expected Administrative Rule rewrite process.
June 2011	The Montana Behavioral Initiative (MBI) Summer Institute, Montana's adaptation of the national Positive Behavioral Intervention and Supports (PBIS) framework, implemented a SMH track to include multiple dialogues with national and statewide representatives around the forthcoming CSCT rule rewrite.
November 2010–February 2011	DPHHS and OPI hosted three Administrative Rule rewrite working group meetings with participants aware of group expectations and background information. Meetings were centered around the nine pillars with ample time for group discussion and individual feedback to DPHHS. Final notes from these meetings are used to guide CSCT Administrative Rule revision(s)
March 2012	The statewide School Mental Health Conference provided a panel discussion with the DPHHS and OPI administrators and co-facilitators of the CSCT working group to provide highlights of the CSCT rule change process with Q & A
March–May 2012	DPHHS and OPI leaders will draft and develop new Administrative Rules for CSCT based on working group member feedback within notes framed within the context of the nine pillars and host two more working group meetings to review and provide feedback on newly drafted CSCT Administrative Rules and discuss funding mechanisms for CSCT
June 2012	National SMH researcher Mark Weist and researcher Erin Butts will present full-day session at the MBI summer institute to stakeholders around the nine pillars
July 2012	Drafted CSCT Administrative Rules are expected to be ready for public comment
December 2012– Spring 2013	Anticipated time when CSCT Administrative Rules will be legally completed and key stakeholders prepared for new Administrative Rule implementation
Summer 2013	New CSCT Administrative Rules are expected to be in effect

Readiness Timeline for CSCT Administrative Rule Rewrite

It is particularly important that the CSCT licensed mental health centers have an ongoing opportunity to raise questions, get answers, and understand how the SMH research expectations will ultimately inform new CSCT Administrative Rules. For the first time in Montana, rules are being supported, discussed and written by individuals who are highly informed of what research demonstrates as best practice. This exemplary research process not only has the possibility of changing the SMH culture of research to practice across Montana for CSCT, but moreover is a pilot of how to approach future rule revisions for any state system that influences our children, youth and families.

Leaders in implementation, Fixsen, Blase, Naoom, and Wallace (2009) write that for science to influence practice in the human services fields is particularly difficult in part because "the practitioner is the intervention" (p. 532). Thus, the number of individuals serving our children, youth, and families across the nation is extensive, and getting individuals from multisystems to implement science is no small feat. Fixsen and colleagues propose six stages of implementation that include exploration, installation, initial implementation, full implementation, innovation, and sustainability. The authors believe that "the

stages are not linear as each appears to impact the others in complex ways. The stages of implementation can be thought of as components of a tight circle with two-headed arrows from each to every other component" (p. 532). Supporting this understanding of implementation, Montana expects that approaching policy with the trilateral framework firmly in place will lead to integrative and consistent service delivery.

Conclusion

There are positive SMH system changes emerging for the state of Montana guided through the implementation of the trilateral framework emphasizing interconnections among partnership, research, and policy. Montana has developed strong partnerships and collaboration across agencies and departments, identified evidence-based mental health practices to incentivize through policy and increase access to throughout the state. Results from this interconnection of partnership, research, and policy are encouraging and suggest a way to systematically improve SMH for other states. Only time will tell whether impending Administrative Rule Changes of CSCT assist in the expansion and improvement of school mental health in Montana. We look forward to continuing to tell this story as it plays out.

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Building Bridges: The Role of Expanded School Mental Health in Supporting Students with Emotional and Behavioral Difficulties in the Least Restrictive Environment

Carrie L. Mills and Dana L. Cunningham

The implementation of the Individuals with Disabilities Education Act (IDEA) affords students with disabilities the right to a free and appropriate public education in the least restrictive environment (LRE). Consistent with the LRE requirement in IDEA, students with disabilities should be educated with non-disabled peers to the greatest extent possible. When a student cannot be satisfactorily educated with accommodations, modifications, and/or supplementary aids and services in a less restrictive setting, the Individualized Education Program (IEP) team may consider a more restrictive placement to provide more intensive supports. Among students with disabilities, one of the subgroups most frequently placed in segregated restrictive placements is those youth identified as having emotional and behavioral disorders (U.S. Department of Education, 2011). This tendency is concerning as the outcomes for students with emotional disorders are bleak, with few exceptions in the published literature (e.g., Mattison & Schneider, 2009), even when specialized educational supports or placements are provided (Bradley, Doolittle, & Bartolotta, 2008; Siperstein, Wiley, & Forness, 2011; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005).

While some have attempted to outline steps in the decision-making process related to LRE (e.g., Rozalski, Stewart, & Miller, 2010), the criteria underlying these decisions are often unclear. While some ambiguity is inherent in the individualized decision-making approach used by IEP Teams to identify educational plans and placements, the current literature on this topic is limited. Attempts to identify the predictors of placement decisions have yielded mixed results, with some studies finding relatively static factors to be most prominent, such as gender, ethnicity, and socioeconomic status, while others have found dynamic factors to be more influential, such as student characteristics (e.g., achievement, symptom profiles), family characteristics (e.g., level of involvement, parental mental illness), as well as a variety of school-related variables including the availability of school-based supports (Glassberg, 1994; Hendrickson, Smith, Frank, & Merical, 1998; Hosp & Reschly, 2002; Robertson et al., 1998). Surprisingly, retrospective interviews with individuals involved in

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making placement decisions indicate that up to half of students placed in restrictive settings, such as specialized schools, could have been maintained in the less restrictive setting if additional supports were provided (Hendrickson et al., 1998). Given the implications of placement decisions, such as the significant costs of highly restrictive placements, the limited rates of return to less restrictive settings, and the uncertain outcomes for these students, there is a significant need to better understand decision-making processes and the factors that influence these decisions, as well as the most effective ways to facilitate student success in the LRE.

In this chapter, we assert that expanded school mental health (ESMH; see Weist, 2003), in coordination with existing school services, provides an opportunity to develop innovative, comprehensive models to meet the needs of students with emotional and behavioral difficulties in the LRE. Below, we briefly present the overall prevalence, costs, and outcomes related to serving youth with emotional and behavioral difficulties. Next, program components associated with effective interventions for this population are presented. These components include the following: (a) effective classroom and school environments, (b) teacher preparation and support, (c) family engagement and support, (d) transition supports, and (e) evidence-based mental health services. We then highlight several programs that utilize some combination of these elements and conclude with a review of current issues related to the advancement of comprehensive models to best meet the needs of students with emotional and behavioral difficulties.

Before proceeding with the chapter, a few clarifications are provided. First, while this chapter focuses on students with Emotional Disturbance (ED) or at risk for ED, the concepts presented are also likely to apply to students with emotional and behavioral difficulties in both general and special education programs, *regardless* of eligibility category. Second, while public schools have the responsibility and liability of providing supports to students to maximize participation in the LRE, it is suggested that these supports may be most effectively delivered through partnerships between education and mental health, based on an explicit, shared agenda which supports system alignment, efficient resource utilization, and ongoing collaboration. Finally, it is recognized that some students may require and benefit from more restrictive placements. While the debate on full inclusion is complex (Zigmond, Kloo, & Volonino, 2009), a balanced approach similar to the perspective of Yell (1998), who articulated that "to make a placement decision that all students will be in the general education classroom is just as illegal as placing all students with disabilities in special schools" (p. 73) is adopted. The purpose of this chapter is to highlight the possibilities for ESMH to contribute to current efforts to enhance the continuum of supports through collaborative partnerships involving students, their families, and the various systems invested in their educational and emotional welfare. To provide a context for the following discussion, the prevalence, costs, and outcomes for students with ED are reviewed below.

Understanding the Context

Students identified as ED represent 6.5 % of all public school students aged 3–21, yet account for less than 1 % of students with identified disabilities (Aud et al., 2011). According to the US Department of Education (2011), approximately 18 % of students with ED are educated in separate public or private placements, residential facilities, or homebound/hospital environments. Although the numbers have stabilized recently, there was an increase in the utilization of more restrictive settings to educate students with ED from 1990 to 2000 (Furney, Hasazi, Clark-Keefe, & Hartnett, 2003). Placement continues to be a contentious subject, with some asserting that students with ED may be better served in specialized environments outside of general education, while others claim that these students can be effectively served in less restrictive settings (Kauffman, Bantz, & McCullough, 2002; Wagner et al., 2006). Unfortunately, data indicates that less than half of students with ED receive related

services, such as behavioral interventions or mental health services, in school (Hendrickson et al., 1998; Wagner et al., 2006). Although knowledge about the depth and quality of the services these students receive is limited (Bradley, Henderson, & Monfore, 2004), it is clear that many students with ED show minimal, if any, academic and behavioral improvement over time (Bradley et al., 2008).

Considering these outcomes, the costs associated with educating students in highly restrictive environments, outside of the public school setting, are significant. National estimates suggest that it costs an average of $25,580 for a student to be educated in a nonpublic placement, which is at least two times the cost of educating a student in special education in a public school setting (Chambers, Shkolnik, &Perez, 2003). Further, there is limited information about the services provided to students while in highly restrictive placements and regarding their subsequent outcomes after discharge (e.g., Carran, Kerins, & Murray, 2005).

Despite individual successes, students with ED tend to experience poor outcomes compared to students with other disabilities and their nondisabled peers. Related in part to their disability, students with ED often experience more family stressors, display low levels of social interaction and competence, engage in negative interactions with others, and display significant externalizing and internalizing symptoms (Bradley et al., 2004; Wagner et al., 2005). They are also more likely to receive lower grades, change schools frequently, drop out of school, and experience higher rates of grade retention, suspensions, and expulsions (Bradley et al., 2008; U.S. Department of Education, 2009; Wagner & Cameto, 2004). In addition, youth with ED have more contact with the juvenile justice system and experience unstable employment and educational trajectories following high school (Bradley et al., 2008; Quinn, Rutherford, Leone, Osher, & Poirier, 2005), the cumulative effect of which results in significant financial costs to society (President's New Freedom Commission on Mental Health, 2003). In light of these challenges, many students with ED are not provided with the adequate skills or supports to help them succeed while they are in school (Bradley et al., 2008). Together, these findings highlight the need for effective intervention for these students.

Intervention Components for Students with Emotional Disorders

The prevalence and unmet need, significant costs associated with restrictive placements and dismal outcomes for many students with ED, warrants critical evaluation of current intervention models to identify areas for improvement. Below a number of components that should be considered when designing coordinated and comprehensive school mental health programs to support students with complex mental health needs in the LRE are presented.

Building Positive School Environments and Supports for Learning

There is evidence that system-level factors, such as the sociopolitical climate, availability of financial resources, and the level of school engagement in reform efforts, may impact identification for special education, the type of school and community services received, and the placement of students with ED (Duchnowski & Kutash, 2011; Siperstein et al., 2011; Wiley & Siperstein, 2011). In addition, national studies of classrooms educating students with ED have observed unfavorable learning conditions, including low levels of student engagement, high rates of disruptive student behavior, and limited specialized academic programming (Kern et al., 2009). While specific instructional supports are critical given the reciprocal nature of academic achievement and mental health (Welsh, Parke, Widaman, & O'Neil, 2001), they are not included in this chapter as recent guidance is available elsewhere (Lewis, Hudson, Richer, & Johnson, 2004; Simpson, Peterson, & Smith, 2011).

Workforce Development, Ongoing Collaboration, and Support

Recent evidence suggests that students with ED increasingly receive more instruction in the general education environment (Wagner et al., 2006). Despite the emphasis on teacher preparation in recent reform efforts, preparation to support teachers of students with emotional and behavioral challenges remains inadequate (Koller & Bertel, 2006; Oliver & Reschly, 2010). Teachers are often expected to integrate students with ED into their classrooms without relevant in-service training, minimal consultative support, and often without the support of paraprofessionals (Wagner et al., 2006). Compounding the issue, teachers of students with ED often have less experience and education, and higher levels of stress, than other teachers (Billingsley, 2004; Henderson, Klein, Gonzales, & Bradley, 2005; Wagner et al., 2006).

In general, critical skills in evidence-based classroom management include providing structure, engaging students, providing feedback on expectations, and developing a continuum of responses to appropriate and inappropriate behavior (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). Additional recommendations for teachers of students with ED include knowledge of functional behavioral assessment, self-management techniques, family engagement strategies, and community supports, as well as understanding of the relationship between behavior and environmental conditions (Kern et al., 2009; Lewis et al., 2004; Simpson et al., 2011; Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008). While this literature provides a critical foundation for teacher preparation programs, evidence suggests that ongoing implementation support is needed to facilitate the transfer and maintenance of skills (Han & Weiss, 2005). School mental health providers can play a critical role by providing much needed consultation and support to teachers of students with, or at risk of, ED.

Prioritizing Family Engagement and Support

Across developmental periods, family involvement in schools is linked to positive functioning, academic performance, and the success of mental health interventions in school and community settings (Hill & Taylor, 2004; Hoagwood, 2005). For students with ED, the development of a strong partnership between the family and school is critical as their families report working harder to obtain services, yet are less satisfied with the services they receive when compared to families of children with other disabilities (Wagner et al., 2005). In addition, many families of children with ED perceive teachers as unprepared to work effectively with their children, are dissatisfied with their child's school, and frustrated with the special education process (Jivanjee, Kruzich, Friesen, & Robinson, 2007; Wagner & Cameto, 2004), which may be due to the limited number of families who receive case management and family support services (Wagner et al., 2006). This presents a unique opportunity for education and mental health systems to collaboratively provide case management and family support to target the complex needs that are often experienced by families of children with ED and help maintain placement in the LRE.

Consistent with best practices in family engagement, interventions should be strength-based and focused on resilience (Hoagwood, 2005). Despite reports of increased risk factors, families of children with ED perceive themselves to possess significant strengths, which can be a powerful foundation for positive change (Corliss, Lawrence, & Nelson, 2008). In partnership with school staff, school mental health providers are well positioned to facilitate communication between families and schools. They can share information about school-related issues (e.g., student-teacher interactions, strategies for successful transitions), support increased family involvement in education, and facilitate access to community-based services and supports.

Facilitating Successful Transitions

Students with ED experience multiple transitions, including normative transitions between school levels (e.g., elementary to middle), transitions to less/more restrictive educational placements, transitions related to acute mental health crisis, and transitions secondary to entering adulthood, all of which can be quite difficult. Below, we have chosen to highlight some key findings on nonnormative transitions related to crisis or placement changes, as well as transitions related to exiting the educational system.

Transitions Across Placements

When students transition across levels of care, such as from residential or day treatment back into their regular school environment, several factors other than the student's improvement in functioning should be considered. Factors associated with positive transitions include frequent, ongoing communication with families and across agencies, active efforts to maintain relationships across settings, and careful exploration of the student and family's expectations and experiences related to the transition (Walter & Petr, 2004). These findings suggest that communication and planning are necessary to ensure smooth transitions among levels of restrictive settings, within and outside of the public school continuum.

When students in special education are able to meet the academic and social-emotional behavioral expectations in general education, reintegration or "step down" should be considered. However, the willingness of teachers and/or parents to support reintegration is variable and likely influenced by perceptions about the purpose of special education, anxieties about potential negative consequences, and a lack of adequate data to inform decision-making (Powell-Smith & Ball, 2008). Consistent with a systems-level, problem-solving approach, Powell-Smith and Ball (2008) propose a basic model for the reintegration of students who are exiting special education and assert that such interventions should consider the expectations and functioning not only of the identified student but also of the teacher and the classroom environment as a whole. These considerations are relevant not only to exiting special education but also to any change in placement or major transition.

Transitions to Adulthood

Given the increased focus on transition planning in recent reauthorizations of IDEA, preparation for successful transition must begin well before the student leaves school. Wagner and Davis (2006) identified five best practices in the preparation of youth with ED for transition, including (a) the development of meaningful relationships, (b) rigorous and individualized instruction, (c) relevant or "authentic" learning opportunities, (d) a focus on the whole child, and (e) the involvement of students and families in goal-driven transition planning. While estimates suggest that approximately 75 % of schools attempt to contact community-based services and support for transitioning students with ED (Cameto, 2005), the extent to which these connections are successful and the degree to which transitioning youth are prepared to navigate, participate in, and advocate for treatment and services are unclear.

Researchers and practitioners have recommended several changes to policy and practice to better support transitions among this population, including accurate assessment of strengths and needs across multiple domains, which are informed by multiple perspectives (Carter, Trainor, Sun, & Owens, 2009). In addition, barriers that limit the participation of youth and families should be identified and minimized. Lane and Carter (2006) note that "parents are more often infrequent or passive participants instead of valued and well-equipped contributors to the transition planning process" (p. 68). To improve family participation, they stress the need for (a) accurate information, training, and resources to enable parents to be effective advocates; (b) greater understanding and utilization of formal and informal supports; and, finally, (c) the ongoing provision of direct support to families based on individual needs.

Delivering Evidence-Based Mental Health Treatment

Effective early intervention for students at risk of being identified as ED is important as it diverts more restrictive placements and is less intensive and costly than interventions provided once problems become more severe (Kern et al., 2009). When students with ED receive appropriate behavioral supports, they are more likely to remain in the public school setting as opposed to being moved to a more restrictive school placement (Cunningham, King, Cook, & Richmond, 2010; Eber, 2008). Unfortunately, Bradley and colleagues (2008) concluded that evidence-based practices are not commonly utilized among programs that serve students with ED.

Despite low utilization of evidence-based interventions, there are several successful practices that address the presenting behavioral and academic needs of students with ED. Across the nation, schools are adopting and implementing problem-solving models, such as Response to Intervention (RTI) and Positive Behavior Supports (PBS), to promote positive outcomes for all students, including those identified as ED (Sugai & Horner, 2009; Lewis, Jones, Horner, & Sugai, 2010). RTI involves determining the student's specific needs through screening and assessment, implementing an evidence-based intervention, and monitoring student progress, while PBS uses a tiered system of supports to address the needs of all students. Sugai and Horner (2009) proposed that RTI provides the guiding principles with respect to assessment and intervention and PBS is an example of how to apply these principles.

In the tiered model all students receive the primary level of interventions to promote mental health and prevent problem behaviors, such as teaching prosocial behavior, while students at risk of exhibiting problem behavior may receive more specialized, secondary-level interventions. Empirically supported practices and interventions are increasingly available and often address multiple levels of intervention. For example, incentive systems (Kern et al., 2009) may be utilized to promote positive behavior school-wide or just for individual students, as seen in the multicomponent Classwide Function-Based Intervention Teams intervention (Wills et al., 2010). Examples of other programs which support at-risk students include Check, Connect, and Expect (CCE; Cheney et al., 2010) and First Step to Success (Walker et al., 1998). The most intensive level of supports, or tertiary level, is provided to students with the most complex needs. While additional examples of intensive school-based interventions will be presented later, Prevent-Teach-Reinforce (PTR; Iovannone et al., 2009) is an example of a multicomponent tertiary intervention that has shown evidence of initial success.

Intervening with Culturally Diverse Youth

Prior studies have reported the overidentification of students of color in special education, citing contributing factors such as school context, access to resources, inequitable discipline practices, and cultural mismatch (Skiba et al., 2008); however, others contend that identification is not disproportionate and highlight the finding that many youth are actually under-identified and underserved (Kauffman, Mock, & Simpson, 2007). Despite the controversy, significant concerns regarding the access, utilization, and effectiveness of mental health services for minorities have been well documented (U.S. Department of Health & Human Services, 2001). Therefore, it is imperative that professionals working with culturally diverse youth consider the youth's cultural history and utilize culturally sensitive and appropriate practices (Bernal, 2006; Serpell, Hayling, Stevenson, & Kern, 2009). Specifically, RTI has been proposed as a promising approach to reduce the number of culturally diverse students disproportionately identified as ED (Harris-Murri, King, & Rostenberg, 2006). The authors suggest that a culturally responsive approach recognizes the prior interactions of families and cultural groups with the education system, increases awareness of biases or stereotypes among school

staff, recognizes variability in learning approaches, and incorporates an awareness of culture in instructional practices and class activities. Considering the essential components presented above to support students in the LRE, examples of school-based programs that utilize variations of these components to engage students, families, and school staff to attain positive outcomes are briefly reviewed.

Examples of School-Based Programs

Collaborative school-based programs have been identified as promising approaches to address the needs of students with ED in special education (President's New Freedom Commission on Mental Health, 2003). One school-based program developed for students with ED is the Intensive Mental Health Program (IMHP; Vernberg et al., 2006). The IMHP serves students, ages 5–13, following inadequate progress with less restrictive services. While participating in IMHP, students remain in their neighborhood school for half of the day and receive behavior management interventions at home and school, individual and family therapy, as well as other psychosocial and biomedical interventions. Evaluations from the initial stages of the IMHP are promising, as many students showed improvements in their behavioral and emotional functioning, and over 60 % of the participating students returned to their neighborhood school or to a less restrictive setting.

Robinson and Rapport (2002) described another approach to meet the needs of students with ED by implementing a day-treatment program model in the public school classroom. Students who are not progressing in less restrictive settings are provided academic instruction as well as mental health treatment by a multidisciplinary team using a behavioral treatment approach. This multimodal program also provides wraparound services to families by utilizing community resources. This treatment approach shows promise as about half of the participants showed some improvement in their overall functioning, although many continued to exhibit relatively severe symptomatology. Two other empirically supported programs that integrate education and mental health to engage families in the pursuit of improved student behavior are the Reaching Educators, Children, and Parents (Weiss, Harris, & Catron, 2003) and Positive Attitudes for Learning in Schools (Atkins, Graczyk, Frazier, & Abdul-Adil, 2003) programs.

Another innovative model of school-based programming for students with ED in Maryland (Cunningham et al., 2010) was developed through a collaboration between the State Department of Education, a major university, and the local school district. This program is staffed by clinicians and case managers who are based in the school system's Transition Programs for students with ED. Students in the Transition Programs are educated primarily in self-contained classes in a public school. Students referred to this program were not successful in their home school placement and are at risk of being moved to a more restrictive, nonpublic placement.

In addition to intensive behavioral management strategies such as point systems, rewards, behavioral contracting, and paraprofessional support provided by the Transition Program, students and families participating in the program receive individual, group and/or family therapy, case management, and psychiatric consultation services from university staff. While services are primarily delivered in the school setting, services are also provided in the home and community, when needed, to facilitate family involvement. In addition, university staff offer ongoing training, support, and consultation to school staff to build their capacity and knowledge related to serving youth with ED. Participating students demonstrated significant improvements in their academic and behavioral performance as the percentage of courses passed increased from 62 % to 87 % and inappropriate classroom behaviors decreased by almost 50 % within 1 year (Cunningham et al., 2010). In addition, significant cost savings are associated with the program with approximately $31,000 saved per student for every year a nonpublic school placement is averted (Slade et al., 2009).

While the potential for school-based interventions to improve the functioning of youth with ED has been recognized and strongly recommended (President's New Freedom Commission on Mental Health, 2003), progress in implementing an effective school-based mental health agenda for youth with ED has been limited. Research indicates that the most effective school-based interventions for youth with and at risk for ED address externalizing behavior problems at home and school, internalizing problems at home, social skills at school, and general academic skills (Reddy, Newman, De Thomas, & Chun, 2009), highlighting the need for collaborative efforts. However, Kutash, Duchnowski, and Green (2011) caution that while many school-based mental health programs demonstrate success in improving the emotional functioning of students, they often struggle to demonstrate similar impacts on academic performance. Although the contexts in which the aforementioned programs deliver services vary, all of them appear to incorporate the critical components identified to support students with ED, including a focus on supportive learning environments, teacher and family support, facilitated transitions, and evidence-based treatment.

Current Issues and Challenges

A number of challenges remain in the development of comprehensive and effective intervention models for students at risk of or identified with ED. These include the potential impact of pending educational and healthcare reforms, legal and cost considerations, and the lack of rigorously evaluated outcome studies. After exploring these issues, the chapter concludes with a brief summary and highlight of the role of ESMH in supporting positive outcomes for students with ED in the LRE.

Given that schools are the primary provider of children's mental health services (Rones & Hoagwood, 2000), the implications of recent reform efforts are significant. Current policies and practices will need to be thoughtfully reevaluated to ensure efficient and coordinated models of service delivery. ESMH providers must continue to prioritize the development of a shared agenda; develop, implement, and evaluate integrated intervention models; monitor outcomes; and focus on engaging naturalistic supports (Atkins, Hoagwood, Kutash, & Seidman, 2010). Irrespective of the specific model implemented, the goal of improving outcomes for students with ED should be a uniting mission to mitigate the chaos often associated with significant reform efforts.

To ensure a free and appropriate public education for all students, schools must provide related services to students in special education if these services allow for increased access to, and benefit from, special education. Although case law provides some guidance on this mandate, the issue continues to be complex and ambiguous (Norlin, 2007). In addition to compliance with legal mandates, schools (and society) must also consider the cost implications of failing to address this issue. Ineffective programming and inappropriate restrictive placements are costly; however, interventions to support students in the LRE are likely to demonstrate substantial cost savings. Ideally, these savings would then be reinvested to further support mental health promotion and intervention, resulting in even more cost savings and improved outcomes.

Despite the interventions referenced in this chapter, there is a paucity of research and limited theoretical models to guide academic and behavioral intervention efforts for this population (Atkins et al., 2010; Rones & Hoagwood, 2000). In addition to more rigorous evaluation of existing programs, identification of the systemic barriers to the adoption and implementation (with fidelity) of evidence-based practices will be an important next step (Kern et al., 2009). Likewise, an examination of the policies and practices in states that have been able to effectively serve students in inclusive settings should also be examined (Becker et al., 2011). Additional factors that may warrant consideration include the degree of implementation of problem-solving or tiered intervention models, teacher preparation and supports for differentiated instruction, and the extent and quality of school mental health services.

ESMH and Coordinated Efforts to Serve Students in LRE

While this chapter provides only a brief overview of the role of ESMH to support students in the LRE, the high prevalence of emotional disorders among school children necessitates the continued development and implementation of universal interventions to ameliorate and prevent negative outcomes among this population. Furthermore, continued focus on youth and family engagement, as well as exploration of factors leading to more restrictive placements, particularly related to transitions, will inform intervention development.

In sum, school mental health providers are in a unique position to support a number of the components identified in this chapter. Based on the experience of the authors of this chapter leading local ESMH programs, along with informal discussions with colleagues in similar roles, the following points are suggested. First, the use of flexible funding models to allow school mental health clinicians to collaborate with school staff to implement preventive interventions, such as those targeting school climate and mental health promotion, is to be advocated for. In addition to providing direct services to students who require intensive supports, ESMH providers are also able to support family engagement in education, coordinate care across systems, facilitate normative and nonnormative transitions, and potentially generate cost savings which can be reinvested to provide additional student supports.

Next, just as it is essential for school staff to receive additional training to better understand the mental health needs of their students and effective interventions, it is suggested that it is also incumbent upon ESMH providers to understand the most effective instructional practices and interventions for these students (Lewis et al., 2004; Simpson et al., 2011) and aid in the promotion of positive environments to support student learning (Atkins et al., 2010). In order for school mental health professionals to effectively participate in the aforementioned roles, highly itinerant models of service delivery are cautioned against, as this also limits the scope and impact of services.

Finally, preliminary evidence suggests that collaborative partnerships between education and mental health can produce high-quality, multicomponent programs and provide opportunities for shared learning. While further evaluation is needed, many students who participated in such programs were able to be successfully maintained in their current placement and demonstrated academic and behavioral gains. These programs efficiently utilize limited resources and respond to calls in the education and mental health fields to develop the awareness, knowledge, and skills required to build bridges between effective instructional and clinical interventions to improve outcomes for students with ED.

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Part II

Prevention and Mental Health Promotion

The Integration of Positive Behavioral Interventions and Supports and Social and Emotional Learning

Catherine P. Bradshaw, Jessika H. Bottiani, David Osher, and George Sugai

Successful schools are safe, supportive, and challenging environments that provide all students with positive conditions for learning and enhance their social competence and academic performance (Osher, Bear, Sprague, & Doyle, 2010). The integration of two school-based prevention models that aim to achieve these broad goals – Positive Behavioral Interventions and Supports (PBIS; Lewis & Sugai, 1999; Sugai & Horner, 2006; Sugai, Horner et al., 2000) and Social and Emotional Learning (SEL; Collaborative for Academic, Social, and Emotional Learning [CASEL], 2008; Elias et al., 1997; Zins & Elias, 2006; Zins, Weissberg, Wang, & Walberg, 2004) – can create a comprehensive, multi-tiered prevention approach to meet the needs of all students (Adelman & Taylor, 2003; Sugai & Horner, 2006; Osher, Dwyer, & Jackson, 2004; Strein, Hoagwood, & Cohn, 2003; Weist, 2001). The PBIS framework seeks to reach these ends by altering the school's organizational context and works with adults in the school to implement enhanced procedures and systems with fidelity to guide data-based decisions related to student behavior problems and academic performance. SEL uses a student-centered, strengths-based approach that aims to promote a set of core student competencies (i.e., self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) through culturally and developmentally appropriate instruction (CASEL, 2003, 2008; Elias et al., 1997).

Although the goals of both PBIS and SEL are similar in their focus on improving the school environment and promoting positive behavior, they differ in their specific primary objectives, theoretical foundations, organizational structure, and activities. Consequently, some confusion has developed about the compatibility of these two models and whether they can be coordinated in order to optimize positive social, emotional, and academic outcomes for students. In this chapter, we provide a brief overview of each model and a rationale for their integration. We then outline a step-by-step integration approach and feature examples of two different types of SEL and PBIS integration.

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Two Complementary Approaches to School-Based Prevention

Positive Behavioral Interventions and Supports (PBIS)

Overview

PBIS refers to a school-wide application of behavioral systems and interventions to achieve behavior change in schools (Horner, Sugai, & Anderson, 2010; Sugai, Horner et al., 2000). PBIS has strong behavior analytic foundations and is a non-curricular framework that strives for a flexible fit with school culture and context. It can be implemented in any school level, type, or setting. A three-tiered, public health system-wide framework is applied (Mrazek & Haggerty, 1994; O'Connell, Boat, & Warner, 2009; Walker et al., 1996) to guide development and implementation of a continuum of behavioral and academic programs and services: (a) universal (primary, school-wide "green-zone"), (b) selective (secondary, "yellow-zone"), and (c) indicated (tertiary, "red-zone") (see Fig. 1). The universal elements of the model, typically referred to as school-wide PBIS, are the most commonly implemented aspect of the three-tiered model. Currently, over 18,200 schools have participated in the implementation of the universal school-wide elements of PBIS (www.pbis.org).

The tiered PBIS framework focuses on the academic, behavioral, and environmental contexts in which behavior problems are observed. Applying PBIS, schools establish a set of positively stated, school-wide expectations for student behavior (e.g., "Be respectful, responsible, and ready to learn"), which are developed by the school's PBIS team and taught to all students and staff across all school settings (e.g., classroom, hallways, buses, field trips, dances, sporting events). A school-wide system is then developed to formalize how adults and students are recognized for exhibiting the expected positive behaviors appropriately in a given setting. Although the focus is on increasing the frequency of positive interaction between staff and students and between students themselves, tangible reinforcers, such as tickets, parties, prizes, or special privileges like an opportunity to have lunch with a favorite teacher or administrator, are sometimes used to formalize and prompt acknowledgements.

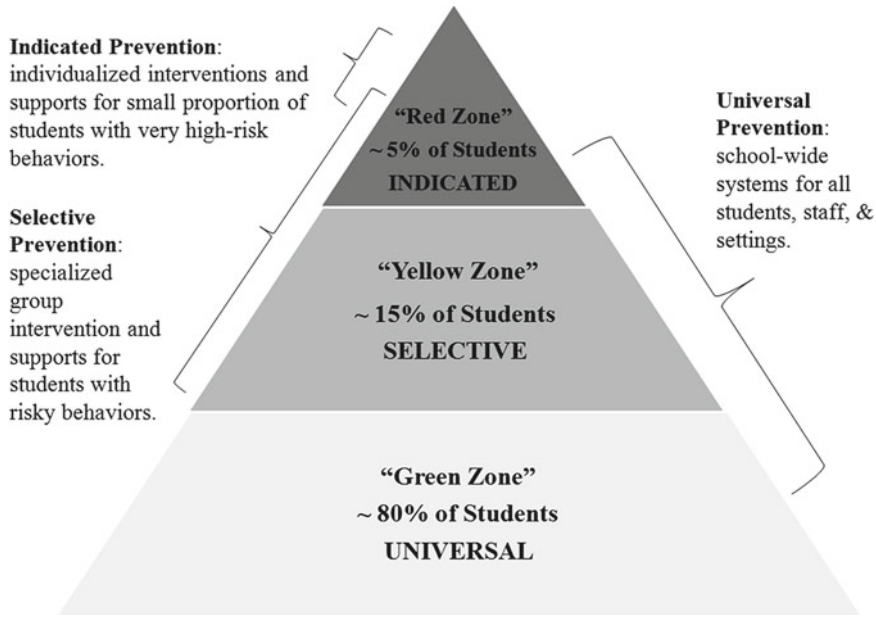

Fig. 1 Three-tiered framework of Position Behavior Interventions and Support (PBIS) (*Note*. Adapted from Walker et al. (1996), O'Connell et al. (2009), and Mrazek and Haggerty (1994))

The PBIS framework emphasizes teaching, prompting, and acknowledging student use of developmentally and contextually appropriate expected behaviors so that (a) prosocial behaviors are more likely to be emitted instead of rule violating behavior; (b) staff attention is directed toward fostering safer and respectful school environments or cultures; (c) chaotic learning environments become more preventive, positive, and predictable; and (d) more strategic supports can be enlisted for students who present more resistant problem behavior. The PBIS framework also clarifies disciplinary consequences with respect to minor (classroom-managed) and major (administrator-involved) rule violations. The school discipline system is reconceptualized as an inhibitor for students who have relatively good social behaviors and as a screening tool for students who require more intensive behavior supports and interventions.

Because student and adult behavior are so inextricably intertwined, the PBIS framework provides structures and routines to support adults so that consistency, predictability, and positive relations are promoted across school contexts. School-wide implementation is emphasized in order to establish staff buy-in and is facilitated through a team-based process. Each PBIS school forms a leadership or implementation team, which is comprised of a teacher from each grade level, at least one administrator, and student support staff. Parent and student membership and participation are strongly encouraged. The PBIS team leader is often an administrator or experienced teacher. A coaching process is used at the school, district, and state level to serve as a bridge between professional development and planning activities and the team's actual implementation efforts in the school. Coaching also is used to promote high fidelity implementation through ongoing progress monitoring, prompting, and encouragement. Individuals who provide coaching supports can be internal to the school or externally provided by the district; coaches are typically school psychologists, guidance counselors, social workers, or other staff who have expertise in behavior management, social skills instruction, data-based decision-making, classroom management, school discipline, functional behavioral assessment, and behavior intervention planning. A district and state-level support team is also formed to provide training, coaching, evaluation, policy, and funding guidance and technical assistance (e.g., see Bradshaw & Pas, 2011).

A critical element of the PBIS framework is the use of data to inform and guide planning and implementation decision-making (Irvin et al., 2004, 2006; Sugai & Horner, 2006). The emphasis is on the collection of multiple data elements on both desired and problem behaviors to monitor implementation quality and program outcomes. The school's PBIS team (a) specifies the most important questions that must be examined on a routine basis (e.g., rate of suspension events each day, by location, by event type), (b) determines the best data source (e.g., office discipline referrals), (c) acquires a data system that enables easy input and output displays (e.g., School-Wide Information System or SWIS [www.swis.org]), (d) follows a regular schedule for review and analysis of data, and (e) develops a routine for disseminating and acting on the decisions (e.g., whole school, groups of students, and/or individual students).

Within a PBIS framework, data are used to answer four main questions. First, how are students doing – *what's going on?* Second, is the intervention or practice having the desired effect – *is it working?* Third, is the intervention being implemented as developed and recommended – *are we using it correctly?* And, fourth, what changes are needed to improve the effectiveness, efficiency, relevance, and durability of the intervention and its effects – *what next?* Several instruments and guidelines have been created to support PBIS data-based decision-making around the four questions (e.g., Bradshaw, Debnam, Koth, & Leaf, 2009; Horner et al., 2004).

Empirical Support

Increasing evidence suggests that successful implementation of school-wide or the universal (Tier 1) PBIS system is associated with sustainable changes in disciplinary practices and improved systems to promote positive behavior among students (Barrett, Bradshaw, & Lewis-Palmer, 2008; Bradshaw,

Reinke et al., 2008; Horner et al., 2009). Quality implementation of school-wide PBIS has been linked with significant reductions in disruptive behaviors and improved social skill knowledge (Barrett et al., 2008; Horner et al., 2009; Metzler, Biglan, Rusby, & Sprague, 2001; Sprague et al., 2001). Specifically, several studies, including two randomized controlled studies of school-wide PBIS in elementary schools, have shown that high quality implementation of the model is associated with significant reductions in office discipline referrals and suspensions (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2009) and other problem behavior (McIntosh, Bennett, & Price, 2011), such as teacher ratings of classroom behavior problems, concentration problems, emotion regulation problems, and bullying (Bradshaw, Waasdorp, & Leaf, 2012; Waasdorp, Bradshaw, & Leaf, 2012).

Significant improvements also have been observed in student reports of school climate (Horner et al., 2009; McIntosh et al., 2011), staff reports of the school's organizational health (e.g., principal leadership, teacher affiliation, and academic emphasis) (Bradshaw, Koth et al., 2008; Bradshaw, Koth, Thornton, & Leaf, 2009; McIntosh et al., 2011), teacher self-efficacy (Kelm & McIntosh, 2012; Ross & Horner, 2006), and academic achievement (Bradshaw et al., 2010; Horner et al., 2009; McIntosh et al., 2011).

Improvements in the schools' organizational context achieved through PBIS, in turn, may enhance the implementation quality of other more intensive preventive interventions (Bradshaw, Koth et al., 2009) and reduce the need for more intensive school-based services (Bradshaw et al., 2010). Consistent with the three-tiered logic, evidence indicates that the impact of PBIS may vary as a function of the child's risk profile or the age at which she or he is first introduced to a PBIS environment (Bradshaw, Waasdorp et al., 2012; Waasdorp et al., 2012). In a recent randomized controlled trial of PBIS in which the universal, school-wide PBIS model was contrasted with the integration of selective preventive interventions and school-wide PBIS, significant impacts were demonstrated on teacher efficacy, academic performance, and special education service use (Bradshaw, Pas, Goldweber, Rosenberg, & Leaf, 2012).

Social and Emotional Learning (SEL)

Overview

While PBIS refers to a school-wide application of behavioral systems and interventions to achieve behavior change in schools, SEL emphasizes the perspective that enhancing students' cognition and emotions are also critical for students' success in school, career, and life. SEL involves the processes through which children and adults acquire and effectively apply the knowledge, skills, and attitudes necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. SEL integrates competence-promotion and youth-development frameworks that foster personal and environmental protective mechanisms and reduce risk factors (Bear, 2010; Greenberg et al., 2003; Guerra & Bradshaw, 2008; Hawkins, Smith, & Catalano, 2004). The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2003) has identified five interrelated cognitive, affective, and behavioral competencies: *self-awareness* (ability to accurately recognize one's emotions and thoughts and their influence on behavior), *self-management* (ability to regulate one's emotions, thoughts, and behaviors effectively in different situations), *social awareness* (ability to take the perspective of and empathize with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports), *relationship skills* (ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups), and *responsible decision-making* (ability to make constructive and respectful choices about personal behavior, social interactions, and school) (CASEL; Zins, Payton, Weissberg, & O'Brien, 2007). The capacity to coordinate these competencies when

dealing with daily situations and challenges provides a foundation for better adjustment and school performance as reflected in more positive social behaviors, fewer conduct problems, less emotional distress, and improved grades and academic test scores (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

In addition to a focus on individual competencies, SEL also provides a framework for school improvement (Devaney, O'Brien, Resnik, Keister, & Weissberg, 2006). SEL programming is intended to be implemented in a coordinated approach school-wide, and lessons are reinforced in and out of the classroom. Specifically, the SEL framework can be used to promote conditions identified as necessary for learning and academic achievement: physical and emotional safety, school connection, social-emotional learning, quality instruction, and a climate of high expectations for achievement and behavior (Osher et al., 2010). Furthermore, SEL emphasizes the importance of enhancing students' competencies with developmentally appropriate and culturally competent classroom instructional strategies and teacher practices to promote students' social, emotional, and academic learning. A recent advance, for example, has been to establish preschool to high school SEL learning standards that specify what students should know and be able to do (see, e.g., the State of Illinois Social and Emotional Learning standards at http://www.isbe.state.il.us/ils/social_emotional/standards.htm).

SEL draws on research regarding core skills and other protective factors that have been shown to be associated with positive youth outcomes across multiple domains. For most SEL programs, reductions in any particular high-risk behavior or the establishment of specific positive behaviors are achieved through a longer-term investment in developing the social and emotional competencies of children. By fostering protective factors and promoting social-emotional well-being, SEL has the potential to reduce or prevent a range of immediate and long-term untoward outcomes across multiple ecological settings (see Fig. 2). For example, by promoting self-regulation, youth learn to express positive and negative affect while maintaining appropriate behavioral control (Denham & Weissberg, 2003).

Empirical Support

There is a growing body of evidence documenting the effectiveness of SEL programs. A series of meta-analyses and reviews have concluded that universal school-based SEL interventions are generally effective across a diverse range of social, emotional, behavioral, and academic outcomes (see CASEL, 2003; Durlak et al., 2011; Substance Abuse and Mental Health Services Administration [SAMHSA], 2002; Wilson, Gottfredson, & Najaka, 2001; Zins et al., 2004). For example, the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2003) reviewed outcomes on 80 SEL programs, with the goal of providing guidance to educators in selecting appropriate SEL programs. Twenty-two of these programs were identified as higher-quality programs that were well designed, had research that documented their positive impact on behavior and/or academic performance, and provided professional development and technical assistance services to support implementation. In a meta-analysis of 165 published outcome studies of school-based prevention programs, Wilson and colleagues (2001) found that SEL-oriented programs resulted in reduced dropout and improved attendance. The US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA, 2002) reports on model prevention programs supporting academic achievement has also documented increased grade point averages, improvements in standardized test scores, and improved reading, writing, and math skills resulting from school-based prevention programs including SEL components. More recently, a meta-analysis by Durlak and colleagues (2011) that examined results from 213 studies of universal SEL interventions indicated that SEL led to significantly less emotional distress, fewer negative behaviors, improved school attitudes and behaviors, and better academic performance among students, with an 11 percentile-point gain in academic achievement in comparison to

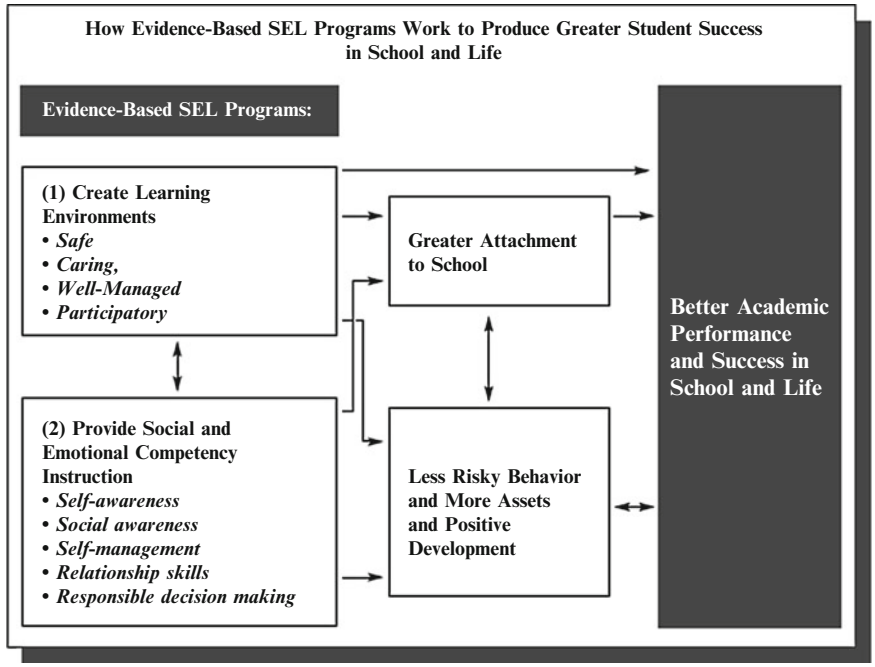

Fig. 2 Framework for Social and Emotional Learning (SEL) programs (*Note*. Source: http://casel.org/wp-content/uploads/2011/04/logicmodel.gif)

controls. A separate meta-analysis on after-school programs conducted by Durlak, Weissberg, and Pachan (2010) found that after-school programs that specifically sought to enhance social and interpersonal skills of students demonstrated significant improvements in self-perceptions, school bonding, social behaviors, academic performance, and problem behaviors.

Although the findings regarding the impacts of SEL programming on academic outcomes have generally been favorable (Durlak et al., 2011; for a review see Zmuda & Bradshaw, 2012), a recent multisite randomized trial of seven different SEL programs did not demonstrate impacts on student academic achievement, behavior, or social-emotional development (Social and Character Development Consortium, 2010). The report highlighted the importance of the fidelity with which SEL programs are implemented, as prior research documents a clear association between high quality implementation and student outcomes (Domitrovich et al., 2008). Specifically, an emphasis on four practices associated with effective skill training (SAFE, sequenced, active, focused, explicit) moderated several program outcomes in both meta-analyses led by Durlak and colleagues (2010, 2011).

Rationale for Integrating PBIS and SEL

The PBIS and SEL approaches have some fundamental differences, but they also have great potential to be compatible and offer a full range of strategies and techniques for effective school-wide management and positive student development (Bear, 2010; Osher et al., 2010). Both emphasize the use of evidence-based strategies and techniques – albeit sometimes different ones – to promote positive behaviors, relationships, and school climate and to prevent or correct behavior problems. It is important to acknowledge some differences in their theoretical roots (e.g., PBIS emphasizes applied behavior analysis, whereas SEL emphasizes cognitive-affective-behavioral perspectives) and their primary aims (e.g., PBIS focuses primarily on

redesigning teaching and learning environments to support behavior, while SEL highlights teaching and learning strategies that enhance student social-emotional competence). As such, the proximal focus of PBIS is on the reduction of problem behaviors and enhancement of positive school expected behaviors, which in turn lead to positive effects on school climate, prosocial behavior, and academic achievement. SEL's primary focus is on enhancing social and emotional and behavioral competencies which in turn lead to reductions in problem behavior and improvements in school climate and academic achievement. Therefore, the process of coordinating SEL and PBIS requires careful blending and thoughtful connection of the core components of the two models into one enhanced intervention or strategy. A school or school system may consider a number of the following reasons for integrating these two models.

Synergistic Effects on Social, Emotional, and Behavioral Skills

Combining PBIS and SEL could address some of the common concerns expressed regarding the two models. For example, although the PBIS literature emphasizes the importance of directly teaching, prompting, and acknowledging prosocial behavior, it does not offer an explicit curriculum for teaching children social-emotional skills and competencies like those taught in a SEL curriculum or the daily integration of social, emotional, and academic learning in classroom instruction. SEL brings added emphases on children's cognitions and emotions as well as social-emotional skill development, which are not emphasized in school-wide PBIS. Furthermore, PBIS and most SEL models have relatively modest intervention effects (Bradshaw et al., 2010; Bradshaw, Waasdorp et al., 2012; Wilson et al., 2001; cf. Durlak et al., 2011[1]), which may be a result of the multitude of factors that collectively contribute to youths' problem behavior. Addressing social-cognitive, emotional, and behavioral skills is important for socially competent behavior, positive peer relations, and academic success (Durlak et al., 2011). Furthermore, the student population is heterogeneous in terms of their need for different types of skill development (Kellam & Rebok, 1992). As a result, school-wide PBIS may not address the underlying non-behavioral mechanisms contributing to the problem behaviors for all students. For example, children at risk for internalizing problems, like depression or anxiety, may benefit from a tiered approach through PBIS, but may also require exposure to SEL content, which addresses emotions more directly, in order to reduce rates of these internalizing problems (O'Connell et al., 2009). In contrast, a student with impulse control problems may benefit from the combined focus on emotion regulation skills through an SEL curriculum and the system for reinforcement offered through school-wide PBIS. The PBIS approach also may benefit SEL by increasing the transfer of learning across settings by connecting and reinforcing the social-emotional skills developed through the curriculum in non-classroom settings, thereby promoting generalization of the skills. SEL models may promote the generalization and sustainability of improved student functioning by developing children's capacities to coordinate cognitive, affective, and behavioral skills (Hawkins et al., 2004; Osher et al., 2010). Broader and longer-term impacts on delinquent and antisocial behavior, school dropout and academic failure, and improved mental health could thus result through the combination of PBIS and SEL.

Increased Efficiency of Program Delivery

Integrated programs are less vulnerable to turnover with administration and more likely to become part of the overall mission and fabric of the school environment (Adelman & Taylor, 2003; Greenberg, Domitrovich, Graczyk, & Zins, 2001). An integrated model could build on and reinforce the individual program components (Domitrovich et al., 2010). Common program elements and staff responsibilities for

[1]Durlak et al. (2011) made the case that SEL programs are as or more effective than other established interventions on several outcomes. This is in contrast to the review by Wilson et al. (2001), which indicated modest intervention effects.

program oversight and management could be streamlined so that there is less repetition and duplication of efforts. Furthermore, with limited time in the school day, the efficiency and effectiveness of any prevention and promotion efforts has to be maximized. An integrated SEL and PBIS model has the potential to reduce system overload and maximize sustainability (Domitrovich et al., 2010).

Tiered Prevention Approach

PBIS provides a framework for the integration of programs and services. Students whose needs are not fully met by a universal SEL program or a universal system of positive behavior support (Sugai & Horner, 2006) would require targeted and/or individually tailored preventive interventions based on systematic assessment of their needs (Debnam, Pas, & Bradshaw, 2012; Hawken, Vincent, & Schumann, 2008; Sugai & Horner, 2009, 2010; Sugai, Horner et al., 2000; Walker et al., 1996). Like other tiered prevention models, such as Response to Intervention, PBIS emphasizes data-based decision-making, continuous progress monitoring, a continuum of evidence-based interventions, and monitoring of implementation fidelity (Hawken et al., 2008). Through review of data at the child, classroom, or school level, other more intensive evidence-based practices or SEL interventions can be selected to meet the needs of the target population. The PBIS framework provides an opportunity for integration of programs to meet a range of student social and emotional learning needs. By using a common language, logic, and structure, as well as the existing systems established through the school-wide PBIS framework to implement the other complementary evidence-based practices, the integrated model may result in more sustainable changes in the school environment and optimize outcomes for the student (Domitrovich et al., 2010; Osher et al., 2007; Sugai & Horner, 2006).

Optimized Organizational Context

As Han and Weiss (2005) noted, "sustainability is likely to occur only in the context of institutionalization of systemic changes in attitudes, expectations, support mechanisms, and infrastructure" (p. 667). Therefore, a multilevel school-wide discipline framework, which has documented effects on promoting organizational climate and reducing problem behaviors across school settings (e.g., Bradshaw, Koth et al., 2009; Bradshaw et al., 2010), may provide the optimal context for enhancing the implementation quality and outcomes achieved by SEL programs. The organizational framework offered by PBIS may help encourage sustained implementation of SEL programs. For example, PBIS can provide a school-wide context in which the SEL core competencies can be taught, practiced, and reinforced throughout the day. Moreover, by improving school-wide climate and behavior management practices across school settings, PBIS may enhance the implementation quality and effects of classroom-based SEL programs (Domitrovich et al., 2008, 2010). Furthermore, PBIS has been shown to increase the amount of instructional time available to teachers (Scott & Barrett, 2004), which makes it more likely that teachers will have the class time to administer classroom-based SEL programs as intended. SEL approaches emphasize an array of integrated explicit and embedded teaching strategies that teachers adopt as common practices to foster student's social, emotional, and academic learning (Zins et al., 2004). SEL's focus on planned, systematic, and developmentally appropriate curriculum and instruction strategies can coordinate with and strengthen PBIS efforts by giving students the voice and skills to contribute to the creation of safe, engaging, learning environments.

Process of Integrating PBIS and SEL

We recommend a model for integration in which both PBIS and SEL principles guide the initial and ongoing school-level planning processes, using this integrated approach. PBIS provides the overarching, three-tiered framework for implementation of SEL and other related programs and supports. SEL programming is integrated and offered at the universal, selective, and indicated levels and a data-driven approach to assessing student needs which, in turn, drives the selection of SEL programs, to direct decisions about referral to intervention, and to monitor program

impacts. In the integrated model, the SEL approach guides the PBIS planning process at the outset to ensure that leadership committees create school expectations that address the four social-emotional conditions for learning: physical and emotional safety, school connection, high expectations for performance and behavior, and teaching social-emotional core competencies in the context of daily classroom instruction. Then, SEL helps to provide students with the tools to realize and contribute to the behavioral expectations set by the school's PBIS implementation plan and the specific goals related to students' social, emotional, and academic learning.

The data collected through PBIS (e.g., office discipline referrals, suspensions, school climate, positive behavior, program fidelity) can be used to guide the selection of more intensive SEL-based preventive interventions for individual children not responding to the universal model. Consistent with the principles of SEL, additional data should be collected on student competencies and social-emotional skills through teacher ratings, parent ratings, self-reports, or performance assessments (Kendziora, Weissberg, Ji, & Dusenbury, 2011). At the class or school level, the data can be used more generally to select other universal programs to meet state SEL standards (see, e.g., the Illinois SEL standards, http://casel.org/standards/learning.php#IL).

An 11 Step Approach to Integration

The following step-by-step approach may be helpful resource for practitioners interested in integrating PBIS and SEL (hereafter referred to as PBIS + SEL). This approach was developed, in part, based on lessons learned from the integration of SEL programs with PBIS through the Johns Hopkins Center for Prevention and Early Intervention (see Domitrovich et al., 2010) and draws upon conceptual frameworks to maximize implementation quality of evidence-based preventive interventions in schools (e.g., Adelman & Taylor, 2003; Domitrovich et al., 2008; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Wandersman, Imm, Chinman, & Kaftarian, 2000).

Step 1. Commit to a Coordinated Implementation of PBIS + SEL

The principal and other school leaders must recognize the value of an integrated PBIS + SEL approach to school improvement and understand what resources (e.g., time, money, staffing) will be necessary to successfully implement and sustain the approach school-wide and at the classroom level. This recognition involves understanding the theoretical, research, and practical underpinnings of both approaches and recognizing ways that they can coordinate efforts to more powerfully promote the social, emotional, and academic learning of all students. This commitment by the school's leadership ensures support for implementation at the highest levels (Debnam et al., 2013; Domitrovich et al., 2008; Kam, Greenberg, & Kusché, 2004).

Step 2. Secure Staff and Broader Community Buy-In for PBIS + SEL Implementation and Integration

A core requirement of PBIS implementation is demonstration that at least 80 % of staff buy-in or agree to implement the approach, especially, given the requirement to implement across all school contexts, rather than in select classrooms or settings. Therefore, a similar buy-in process needs to occur for the integrated PBIS + SEL model, whereby staff formally or informally vote to implement the program, and students and the parent community endorse this school-wide effort. Some schools, particularly at the secondary level, may require a lengthy period of time to garner sufficient buy-in for the adoption of the integrated program, but this is seen as a critical aspect of successful implementation (Adelman & Taylor, 2003).

Step 3. Engage Stakeholders to Form a PBIS + SEL Integration Steering Committee or Team

At this stage, the principal may create a venue to share information and discuss the benefits and potential challenges of PBIS + SEL integration with key school and community stakeholder groups. Key stakeholders should include teachers, students, families, student support personnel,

support staff, and community members. Thereafter, the principal forms a steering committee or team that is representative of these stakeholders and that is authorized to make decisions about planning and implementation. The steering committee can help to ensure shared leadership and buy-in at multiple levels, which is necessary for successful implementation. Because both models encourage the formation of an implementation team, a unified team should serve as a coordinating team for the integrated implementation of PBIS + SEL.

Step 4. Develop a Shared Vision to Implement an Integrated PBIS + SEL Approach at the School

This vision may be informed by the four social-emotional conditions of learning: physical and emotional safety, school connection, high expectations for performance and behavior, and teaching social-emotional core competencies. The creation of the shared vision also helps to gain the necessary buy-in for program adoption and serves as the basis for delineating further the student, staff, and community outcomes against which implementation success and/or adaptation can be evaluated and planned. This shared vision would be linked with a common language and common organizational routines that would reflect the local culture and contents in which implementation is being supported. With clearly specified vision, language, and routines, school leadership can distribute and direct leadership authority and decision-making to support implementation.

Step 5. Assess School-Wide Strengths, Weaknesses, Opportunities, and Threats (SWOT analysis) to Integrated PBIS + SEL Implementation

One tool that can be used to organize the existing programs and identify gaps in levels of need is an inventory the schools' support services using a three-tiered triangle. This program "audit" process can be led by the school's combined PBIS + SEL leadership team, which serves as the organizing body for training, program coordination, and progress monitoring (Devaney et al., 2006; Sugai & Horner, 2006), or by other school-wide teams (Osher, Dwyer, & Jackson, 2004). The objective of such an audit would be to eliminate ineffective efforts, combine or integrate activities that have similar intended outcomes, add activities that are needed for critical needs, and modify activities to enhance efficacy, efficiency, relevance, and durability. An integrated PBIS + SEL approach would acknowledge the existing challenges and limitations by focusing on using existing resources in a more coherent, relevant, and direct manner.

Step 6. Review and Select PBIS + SEL Programming and Formulate Decision-Making Guidelines About Referral

Given the limited systematic research on which elements of PBIS + SEL are most impactful when integrated, we primarily are guided by theory in selecting which components to retain in isolation or blend between models. Without careful attention to the core components of each model, implementers may unintentionally (or intentionally) drop critical elements of the programs that are perceived as harder to implement or incompatible. While the integration process may require additional planning time and coordination of programs, supports, and systems, it will likely result in a more sustainable effort with a broader impact on student outcomes (Domitrovich et al., 2010).

Data sources that can guide selection and referral decisions include office discipline referrals through, for example, the SWIS system (Irvin et al., 2006; Sugai, Sprague, Horner, & Walker, 2000) and parent, teacher, and self-ratings of students' competencies and skills. Programs should be selected with an emphasis on efficiency. Crosscutting SEL programs that impact a range of social, emotional, and behavior outcomes (see CASEL, 2003; Lewis & Sugai, 1999) in an effective manner will help school staff "work smarter, not harder." It is important to note, however, that the implementation of more intensive programs (i.e., "moving up the triangle") requires greater resources and often collaboration with outside agencies (e.g., community-based mental health services). More specifically, the more intensive selective and indicated programs and services often are delivered to

small groups of students or to individual students by staff with specialized training, like counselors or school psychologists. Therefore, these programs and services should be reserved for those students with the greatest needs. By optimizing the implementation of the universal prevention programs, schools can reduce the number of students requiring these more intensive supports.

Step 7. Create an Action Plan for Integration, Based on the Assessment, Which Includes Alignment of Purpose, Goals, Benchmarks, and a Common Timeline

Once the SEL program or set of programs is selected, the integration process requires alignment of goals, activities, and language across the specific SEL program and PBIS, which contrasts with simultaneous implementation of additive or parallel programs that are unrelated (Domitrovich et al., 2010). Therefore, a critical step in the integration process is identifying commonalities and connections between the programs, so that the school uses a common language and process for implementation. Integrating PBIS and SEL requires that the school retain the unique strategies of each model and merge overlapping components, which results in a holistic model that delivers a broader set of approaches simultaneously.

This action planning involves the development of a multi-year implementation plan, which should include the following components: (a) positive statement of purpose, which emphasizes the integration process; (b) procedures for selecting the SEL programming, training staff, implementing and integrating the programs, and sustaining them; (c) an approach for gaining and maintaining staff buy-in for the integrated program or model; (d) positively stated expectations of students and staff involved in the integration and implementation process (as described above, this should involve a school-based PBIS-SEL team, which coordinates the integration and implementation process); (e) procedures and systems for monitoring fidelity of the program components and outcomes for students and the school environment (e.g., student and staff perceptions of climate); and (f) a timeline for implementation that is updated at least once a year to adapt to changes in leadership, resources, and priorities and be responsive to emerging concerns and opportunities.

Step 8. Develop and Provide Ongoing Professional Development Activities

The training and ongoing coaching of school staff should occur in a coordinated effort, so that the models are presented as integrated, rather than discrete, efforts. Research indicates that most schools already are implementing a variety of prevention strategies or programs simultaneously (Gottfredson & Gottfredson, 2002); however, the uncoordinated fashion likely contributes to increased burden, program burnout, lessor outcome effects, or, in some cases, program washout where the activities are contradictory rather than complementary (Adelman & Taylor, 2003; Sugai & Horner, 2006). Therefore, staff must have a clear understanding that the new initiative represents an *integration* of PBIS *and* SEL, rather than just simultaneous independent implementation of the two models. Simply implementing multiple, uncoordinated programs likely contributes to the program fatigue and low implementation quality noted in several studies (Domitrovich et al., 2010; Fixsen et al., 2005). Although the buy-in process can be more challenging for some schools than others, staff should be made aware of and involved in the development of the schools' PBIS + SEL implementation plan (Devaney et al., 2006). Multiple days may be required to conduct the initial staff training – often staggered across the school year; however, ongoing embedded professional development opportunities also must be provided. It should be clear from the start that the three-tiered logic is guiding the program implementation process. The connections between programs should be made explicit to teachers and school staff, otherwise they may be perceived as independent programs.

Step 9. Integrate PBIS + SEL Model Launch

Regardless of whether staff members are familiar with PBIS or SEL, implementation should be planned, integrated, phased oriented, and outcome-driven. Implementation phases include exploration, installation, initial implementation,

full implementation, and continuous regeneration (Fixsen et al., 2005). We recommend creating a phased implementation process, such as beginning with the school-wide activities to address the school context and create the systems necessary for support, and then adopt specific SEL approaches that have been reviewed and endorsed by the school team. The SEL programs could be piloted in select classrooms to gain staff buy-in through developing local exemplars and success stories. Alternatively, schools could layer school-wide PBIS onto an existing SEL program in order to help generalize the skills and competencies developed across all school settings.

School staff members need to be informed, flexible, and creative and work collaboratively in order to make the accommodations needed to integrate and implement PBIS + SEL. The PBIS + SEL team can play a critical role in the integrated implementation of the effective programs, including implementation tracking and outcome monitoring. Similarly, PBIS + SEL coaching can be instrumental in promoting high quality implementation and integration of both models by providing on-site technical assistance and guidance at the team and program implementers (e.g., teachers, student support staff). Having a staff member who is trained in both models and involved in school-wide implementation process of SEL and PBIS and provides coaching or facilitating supports can help ensure a seamless connection between the models.

Step 10. Provide Ongoing Technical Assistance at District and State Levels

The integrated PBIS + SEL approach extends well beyond the school building. Programs and supports must be integrated at the district and state levels in order to ensure accurate and sustained implementation at the building level. School districts and states will play a critical role in providing technical assistance and overall coordination of an integrated PBIS + SEL approach (Barrett et al., 2008; Bradshaw & Pas, 2011; Bradshaw, Pas, Bloom et al., 2012; Devaney et al., 2006; Fixen, et al., 2005), which include, for example, state departments of education or university-based technical assistance center. In fact, some school districts and state departments of education are adopting the three-tiered organizational structure at these higher levels in order to increase efficiency by reducing duplication of programs and staffing, competition for scarce resources, and program burnout and/or turnover (Bradshaw & Pas, 2011; Bradshaw, Pas, Bloom et al., 2012; Barrett et al., 2008). Districts and states often provide resources for technical assistance through coaching and regional or state-wide training events.

Another important type of linkage is with state standards for SEL and PBIS, which are not often integrated at the policy level. The implementation of a PBIS + SEL approach can be used to enable state level support and resources. As noted above, the implementation of more intensive programs and mental health services requires greater resources and often collaboration with outside agencies. Therefore, states and districts play a critical role in facilitating and coordinating the delivery of these programs and services, so that they complement, build on, and extend the continuum of positive behavior support services provided within the school building.

Through linkage of school-based PBIS and SEL efforts with state and federal initiatives, like Systems of Care, Safe Schools/Healthy Students, and Safe and Supportive Schools, delivery of services and programs could be made more coordinated and efficient (Bradshaw & Pas, 2011; Bradshaw, Pas, Bloom et al., 2012; CASEL, 2008). National organizations, such as a National PBIS Technical Assistance Center (www.pbis.org) and CASEL (www.casel.org), provide resources, materials, and assistance in the implementation and evaluation of PBIS and SEL and host leadership forums and trainings to support state and district leaders in the implementation, integration, and sustainability of PBIS and SEL in relation to other programs and initiatives.

Step 11. Evaluate and Refine for Continuous Improvement

Ongoing progress monitoring of implementation fidelity and program outcomes should occur at all stages of the implementation process and can be performed through the PBIS + SEL data collection systems (e.g., surveys, teacher ratings, observations, school records) and other school, district, and state data collection systems

(Devaney et al., 2006; Irvin et al., 2004, 2006; Kendziora et al., 2011). For example, behaviorally oriented data collection systems could be augmented with surveys and rating systems to capture a broader range of indicators, including prosocial behavior, social-emotional functioning, and academic support needs. Implementation data should be collected on all PBIS + SEL processes and components in order to monitor the implementation quality of the integrated system of support and to indicate areas in need of further training and technical assistance. While continuous improvement necessarily involves some innovation, Fixsen et al. (2005) differentiate innovation and improvement from program drift by highlighting the importance of implementing with fidelity first before initiating refinements. This final stage reflects an emphasis on results-based accountability, as described in the Getting to Outcomes (GTO) framework by Wandersman et al. (2000). It is important to emphasize that monitoring should occur at all stages of the implementation process, so that implementers can take steps if needed to enhance implementation when and where necessary.

Examples of the Integration of PBIS and SEL

The integration process could occur in multiple ways. One approach is horizontal, whereby a universal SEL program is integrated with school-wide PBIS. A second approach is vertical integration, whereby evidence-based SEL programs and strategies are implemented at the different tiers (i.e., universal, selected, indicated) of the public health framework (Walker et al., 1996). Below we provide an example of each type of integration based on the Johns Hopkins Center for Prevention and Early Intervention's work with PBIS and Promoting Alternative Thinking Strategies (PATHS; Greenberg, Kusché, Cook, & Quamma, 1995), a universal, classroom-based SEL model, and Coping Power (Lochman & Wells, 2004), an indicated intervention for aggressive children. In both examples, the PBIS framework provides an organizational structure for the integration of these complementary prevention and promotion programs. Below we describe the process followed for integrating these two models with PBIS.

PBIS and PATHS

PATHS is designed to promote social and emotional competence; prevent violence, aggression, and other behavior problems; improve critical thinking skills; and enhance the classroom climate via teacher-led instruction aimed at facilitating emotion regulation (particularly anger management), self-control, social problem-solving, and conflict resolution skills (Greenberg et al., 1995; Kam et al., 2004). The social-emotional skills targeted in PATHS are consistent with the SEL core competencies. PATHS is a universal program which has been shown to be helpful for reducing both internalizing and externalizing behavior problems (Greenberg & Kusché, 2006) and thus is a good complement to the more behaviorally focused PBIS framework. The organizational features of schools implementing school-wide PBIS (e.g., improved organizational health, communication among staff, and principal leadership; Bradshaw, Koth et al., 2009) in turn likely enhance the school-wide implementation of the PATHS curriculum. The more intensive PATHS model will likely meet some of the social-emotional skills deficits displayed by children not responding adequately to universal, school-wide PBIS. The organizational framework offered by PBIS may help encourage sustained implementation of PATHS. By lowering the overall levels of disruptive behaviors in school, PBIS increases the likelihood that teachers will have time to deliver PATHS.

The integration of PATHS and PBIS occurs by first identifying specific connections between the PATHS lessons and the school-wide behavioral expectations (e.g., a common focus on respect for others). The PBIS reinforcement system is utilized to reward use of the SEL skills learned through the PATHS lessons across all school contexts and by all school staff, even those not typically involved in the PATHS program (e.g., cafeteria workers, hall monitors, music teachers, bus drivers). The three-tiered PBIS approach,

along with the data system, provides a structure for identifying children not responding adequately to PATHS, who then are referred for more intensive interventions through the PBIS framework. Although a research study is currently under way to document the combined impact of PBIS and PATHS on student outcomes, a study by Sprague and Golly (2004) reported positive outcomes when testing a combination of school-wide PBIS with another similar universal SEL program called Second Step. Similarly, work by Knoff (2004) on Project ACHIEVE, which connects a school-wide model of positive behavior support with a SEL curriculum (Stop and Think), has also demonstrated promising outcomes.

PBIS and Coping Power

Whereas PATHS was implemented as a universal SEL program (horizontal integration), Coping Power can be integrated vertically with PBIS as an indicated preventive intervention that teaches SEL skills. Most commonly used with upper elementary school children to reduce use of aggressive behavior problems, Coping Power is a multicomponent intervention that provides training in social skills and social problem-solving. It addresses the social-cognitive factors and mechanisms involved in aggressive/disruptive behavior problems over the course of a single school year or longer (Lochman & Wells, 2004). It is traditionally implemented using a group format for students and a separate group for parents. As such, Coping Power's focus on social-emotional and behavior problems for children with increased behavioral risk makes it an ideal program to pair with PBIS. By integrating Coping Power with PBIS, children who are non-responders to the school-wide discipline system and have a persistent pattern of aggressive behavior problems are identified for participation in Coping Power.

A common concern raised about Coping Power is the extent to which the skills developed in the Coping Power sessions are used outside of the group intervention. Connecting elements of the Coping Power child intervention with the whole-school PBIS model may enhance generalizability of the skills developed during the Coping Power sessions for use in other school settings. Specifically, the school-wide structure and reinforcement system formed through PBIS could help extend and generalize the social-emotional and behavioral skills developed in the Coping Power child sessions to other non-group settings, such as the classroom and cafeteria where students are at increased risk engaging in disruptive behavior (Irvin et al., 2006). PBIS also creates a safe, consistent, and predictable environment which will allow children to practice and be reinforced for skills learned in the Coping Power intervention across school settings. Additionally, Coping Power and PBIS language are made consistent across programs, behavior cards, and student goals devised as part of the Coping Power program and are tied to the school-wide behavior expectations. The Coping Power clinician, classroom teachers, and other school staff reward students for exhibiting prosocial behaviors and skills learned in Coping Power. The consistent language and rewarding of behaviors across programs are expected to make it more likely that skills and behaviors learned from Coping Power are practiced and reinforced across school settings, thus increasing generalization. The parent Coping Power sessions also provide an opportunity to educate the parents about how to use the principles of PBIS to establish and reinforce behavioral expectations and SEL skills at home, in turn further generalizing the skills learned at school and in the group sessions to the home environment.

Conclusion

The increasing emphasis on use of evidence-based practices in schools has resulted in some confusion regarding the process by which schools should select and implement programs. While the tendency is to believe that doing more programs will result in better outcomes for youth, doing less in a more effective, effi-

cient, and relevant manner might be better (Gottfredson & Gottfredson, 2002). The use of multiple non-integrated or uncoordinated, and in some cases contradictory, programs may result in program burnout among administrators and teachers and/or washout of program effects (Shriver & Weissberg, 1996). Furthermore, the increased burden of multiple, often redundant program activities for staff and students, will likely result in limited sustainability of the programs. The careful integration of PBIS and select SEL approaches provides the potential for a synergistic effect, both directly on children's social, emotional, and behavioral problems and indirectly through enhanced program implementation and greater efficiency in program delivery.

Further conceptual and empirical work on the integration of PBIS and SEL is needed to test the process outlined in this chapter and to determine the impact of an integrated model on students, schools, and staff. However, we hypothesize that the optimized organizational school structure promoted through a coordinated PBIS + SEL framework can result in a more conducive school environment to implement effective programming, that in turn will lead to greater program integrity and enhanced outcomes for students and staff (Domitrovich et al., 2008). Much of the framing of this chapter has assumed that PBIS precedes the SEL implementation, but one could very well start with SEL and then adopt PBIS. Regardless whether implementation is ordered or concurrent, school staff should carefully consider how all the elements of SEL and PBIS programming fit together in the context of a school-wide effort to most effectively promote a positive school environment and increase students' social, emotional, and academic learning, academic performance, and well-being (Osher et al., 2004).

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Promoting Mental Health in Early Childhood Programs: Serving Low-Income Ethnic Minority Families

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Nearly 25 % of young children in the United States are living in poverty, and a disproportionate number of those children are African American or Latino (Children's Defense Fund, 2011). Living in poverty is stressful and it increases the likelihood that children will have more developmental, academic, and mental health problems than their more economically advantaged peers (Bauman, Silver, & Stein, 2006; Booth & Crouter, 2008; Guyer et al., 2009; National Research Council and Institute of Medicine, 2004).

One of the most important findings from the last two decades of research is that despite the pervasive effects poverty can have on children, positive and skilled parenting can buffer these effects (Lugo-Gil & Tamis-LeMonda, 2008). This is particularly true in the earliest years, when parents are the primary regulators of their children's environments and young brains are developing. The finding has enormous significance because parenting quality, unlike so many social adversities that defy change, has also been shown to be an *alterable variable*. That is, high-quality parenting skills programs can lead to significant and sustained improvements in parenting behavior and at relatively low cost (Barlow, Smailagic, Ferriter, Bennett, & Jones, 2010).

There are a number of evidence-based parenting skills training programs available (Briesmeister & Schaefer, 2007). However, few were originally designed for those populations most in need: low-income, ethnic minority families with limited access to culturally competent mental health services (Forehand & Kotchick, 1996). This is important since interventions can only be effective if the parents these programs are designed to help also see them as relevant, useful, and feasible. This chapter will describe one evidence-based parenting program, called the Chicago Parent Program (CPP), developed in collaboration with low-income, African American and Latino parents and its impact on parents and children living in urban poverty. We will also describe some important

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lessons learned for engaging families in parenting skills programs, a problem that can limit a program's reach and sustainability.

The Chicago Parent Program

The Chicago Parent Program is a 12-session group-based parenting skills program targeting parents of young children 2–5 years old (Gross, Garvey, Julion, & Fogg, 2007). The first 4 sessions center on skills that reinforce positive child behaviors and build parent-child relationships, the second 4 sessions focus on child behavior management skills, and the last 4 sessions address stress reduction, problem-solving skills, and skill maintenance. Parent group sessions are conducted in community-based agencies (e.g., Head Start programs, public schools, childcare centers) and led by trained group leaders using a comprehensive group leader manual that standardizes program content and delivery. Qualifications for becoming a Chicago Parent Program group leader are (a) at least a high school diploma, (b) outstanding interpersonal skills based on references and interactions during the group leader training workshop, (c) experience working with parents, (c) completion of a 2-day Chicago Parent Program group leader training workshop, and (e) passing score (at least 80 % correct) on the group leader training workshop posttest.

The theory guiding the program *content* is based on social learning theory and the coercive family process model (Patterson, 1982). The program's *format* (group discussion of video recorded vignettes of parent–child models shown during parent groups) is based on the pioneering work of Webster-Stratton (Webster-Stratton & Hammond, 1997). During each 2-h parent group session, parents watch and discuss 8–17 brief video recorded scenes of family interactions designed to stimulate discussion and problem-solving around strategies or principles designated for that session. For example, for the session on setting clear expectations for children, parents watch a vignette of a parent giving their child an unclear command to clean up their toys (e.g., "Let's clean up the toys, OK? Do you want to clean up now?"). The video is paused and the group leader asks a series of questions listed in the group leader manual designed to elicit parents' opinions on the clarity of the command, how the parent could have stated the command more clearly, and reasons parents might sometimes give unclear commands to their children. Parents also receive weekly homework assignments to provide them the opportunity to practice the new skills with their child and handouts summarizing important points from the session.

The program was designed to be culturally and contextually relevant for African American and Latino families raising young children in low-income, urban communities. Families vary widely in their childrearing values and styles based on differences in family histories, culture, income, and neighborhood environments (García Coll et al., 1996; LeCuyer, Swanson, Cole, & Kitzman, 2011; McLoyd, Cauce, Tkeuchi, & Wilson, 2000). For example, parents raising children in neighborhoods plagued by gangs and violence are likely to have different rules and discipline strategies that focus on safety and strict adherence than parents raising children in safe, resource-rich environments where rule flexibility is less likely to present a danger (Cruz-Santiago & Ramírez García, 2011; Gross, 1996). Immigrant parents tend to have different expectations of their children than US-born parents based on cultural norms from their country of origin (e.g., Lau, Fung, Ho, Liu, & Gudino, 2011). However, it would be financially and administratively impractical to create separate parenting programs unique to each cultural, racial, and income group, particularly given the increasing diversity of the US population. To that end, the Chicago Parent Program was originally designed to be relevant and effective across multiple racial, ethnic, and economic groups.

Although the Chicago Parent Program teaches parents evidence-based strategies common to most parenting skills programs (Garland, Hawley, Brookman-Frazee, & Hurlburt, 2008), parents are also helped to clarify their childrearing values and goals. Then, through group discussion and problem-solving, parents tailor what they are

learning in ways that help them achieve those goals. In this way, the program can be flexibly applied to parents with wide-ranging cultural beliefs and attitudes.

In addition, select strategies that our parent advisory board warned would not be acceptable across different cultural groups (i.e., parents playing with children, praising children, using time-outs, elimination of spanking) were reframed to be more congruent with parents' values (see Gross et al., 2007 for a fuller discussion of how the parent advisory board guided program development). Finally, most of the families shown in the video vignettes are families of color (46 % African American, 23 % Latino, 31 % non-Latino White), and the scenes depicted were carefully crafted to reflect real-world challenges faced by families from different economic backgrounds (e.g., managing child misbehavior in the grocery store and Laundromat, tantrums in public places, multi-generational parenting conflicts).

Chicago Parent Program Prevention Outcomes

The Chicago Parent Program has been tested in a series of randomized trials in childcare centers serving low-income ethnic minority families of preschool children (Breitenstein et al., 2012; Gross et al., 2007, 2009). These studies, which collectively include over 500 parents and preschool children, have focused on the prevention of behavior problems in community samples at elevated social risk. The aim of this work was to promote positive parenting behaviors early, before dysfunctional parent–child interaction patterns became firmly entrenched, leading to social, emotional, and behavioral problems in children that would be difficult and more expensive to treat. Although our work targets parents of very young children (2–5 years old), we expect parents will apply what they learn to all of their children (those older than five and those not yet born). From this perspective, parenting skills training has the potential for having a large return on investment because improvements in parenting skill are likely to generalize to all of the parent's children.

Results show that the Chicago Parent Program leads to improved parenting and child behavior up to 1 year after the program has ended (Gross et al., 2009). Specifically, intervention group parents used less corporal punishment ($p < .01$) and more consistent discipline with their children ($p < .05$), and they reported improved parenting self-efficacy ($p < .01$) relative to control group parents.

Intervention group children's behaviors also improved relative to control group children (Breitenstein et al., 2012; Gross et al., 2007, 2009). Intervention children had greater reductions in behavior problems based on parent-report ($p < .05$), teacher-report of externalizing ($p < .01$) and internalizing ($p < .05$) behavior problems, and observations coded by raters blinded to intervention condition ($p < .01$). However, the pattern of child behavioral improvements differed by informant and context. Parents reported the greatest improvement in their children's behavior immediately after the parent program ended, improvements that were maintained up to 1 year later. Independent observations of parent–child interactions also indicated that the greatest improvement in child behavior problems was at post-intervention. In contrast, teacher-reported improvements in child behavior were most apparent from the 6-month to 1-year follow-up. These findings suggest there may be a lag in program benefits between changes in parent–child behavior and observable changes in classroom behavior. It also suggests that parenting skills training has an important role in school readiness initiatives (Brooks-Gunn & Markman, 2005; Connell & Prinz, 2002).

Importantly, the Chicago Parent Program was effective for both African American and Latino parents (Breitenstein et al., 2012). Moreover, parent satisfaction ratings were high in both racial/ethnic groups (90.1 % were *very satisfied* and 9.9 % were *satisfied* with the program; 88.3 % reported they would *highly recommend* and 11.7 % would *recommend* the program to another parent).

Currently, the Chicago Parent Program is being implemented in prekindergarten programs, Head Start centers, and community agencies serving low-income families in Chicago; New York City; Washington, DC; Baltimore; and a number of other cities across the country. To ensure that the program is being delivered competently and according to protocol, a 2-day training program and fidelity monitoring system has been developed (Breitenstein et al., 2010a). These are essential features of an evidence-based program needed to support high-quality dissemination (Breitenstein et al., 2010b; Elliott & Mihalic, 2004).

Chicago Parent Program for Treatment of Disruptive Behavior Disorders in Low-Income, Ethnic Minority Preschool Children

In 2009, we began exploring the feasibility and acceptability of using the Chicago Parent Program as an adjunct to clinical outpatient treatment for 2–5-year-old children with disruptive behavior disorders in Baltimore. This unique program, located in the Community Child Psychiatry Program at the Johns Hopkins Bayview Medical Center, is an intensive outpatient psychiatric program providing 3 h of treatment daily over a 4-week period for preschool children with severe disruptive behavior disorders and their parents. The children and their parents are referred from pediatricians, preschool settings, and other clinical outpatient providers. This population of parents (89 % living at or below federal poverty level; 43 % African American) had a range of significant social and emotional problems that affected their parenting, 71 % of the parents had psychiatric histories, 46 % of mothers and 42 % of fathers had histories of substance abuse, and 19 % of mothers and 34 % of fathers had histories of incarceration. Among the children, 51 % had already had child protective service involvement, 30 % had at least one out of home placement, 37 % had been exposed to drugs in utero, and 38 % had witnessed domestic violence. Few of these parents had the skills to manage their children's very challenging behaviors.

From 2009 to 2010, 35 parents of children enrolled in this treatment program attended an abbreviated version of the Chicago Parent Program offered 1 h daily (the brevity of the program was due to the treatment time allowed by medical insurance). In this version, five topics from the Chicago Parent Program curriculum were covered: child-centered time, the importance of routines and traditions, using praise and encouragement, clear commands and following through on commands, and effective use of timeout. We examined pre- to posttreatment changes in parent-reported child behavior problems from the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000) among families attending the outpatient program immediately before and after adding the Chicago Parent Program to the treatment protocol.

At baseline, 77 % of the children had externalizing behavior problem scores in the borderline or clinical range, and 62.5 % had internalizing behavior problem scores in the borderline or clinical range. There were no differences in these baseline CBCL scores between children whose parents did and did not receive the Chicago Parent Program as part of their children's outpatient treatment.

Prior to adding the Chicago Parent Program to the treatment protocol, parents of children in this intensive outpatient treatment program reported a 19 % decrease in their children's externalizing behavior problems (i.e., aggression, hyperactivity, inattention) and a 15 % decrease in internalizing behavior problems (i.e., anxiety, depression, withdrawal) at discharge. After the Chicago Parent Program was added to the treatment protocol, parent reports of externalizing behavior problems showed a 25 % decrease, while reports of internalizing behavior problems showed a 34 % decrease. Although parents began the program with a high degree of skepticism, satisfaction scores at the end of their treatment were high. These data, though preliminary, suggested that the Chicago Parent Program might be an important adjunct to child outpatient treatment to improve parenting skills and child behavior.

From 2010 to 2011, we examined the feasibility and acceptability of using the full, 12-session

Chicago Parent Program for treating disruptive behaviors in a community mental health center for a low-income, ethnic minority child population (94 % African American, 94 % insured through Maryland Medical Assistance). Similar to the earlier treatment population, these children had already faced a great deal of psychosocial adversity; 50 % had had protective service involvement, 25 % had witnessed domestic violence, 33 % had been exposed to drugs in utero, and half were receiving psychotropic medications. Most parents had received a high school diploma or less.

Twenty-eight parents attended the Chicago Parent Program as part of their children's treatment (mean attendance = 50 % of Chicago Parent Program sessions). Interestingly, parents of older children also wanted to attend the program, and, as a result, the ages of the identified child patients of parents enrolled in the program ranged from 3 to 9 years old. As reported earlier, mean child behavior problems decreased from baseline to posttreatment, though to a lesser extent (average decrease in externalizing and internalizing problems was 11 %). However, parent depression scores on the Center for Epidemiologic Studies Depression Scale (Radloff, 1977) decreased by almost half (M = 49 % decrease in depressive symptoms). In addition, parent satisfaction scores were high; 78 % of parents reported they were *very satisfied* with the program and 22 % were *satisfied*; 67 % reported that they believe their child's behavior is *much better* than before they started the program; and 67 % reported that the program *helped a lot* with concerns not directly related to their child.

To better understand how the Chicago Parent Program affected their parenting skills and their children's behaviors, four parents agreed to be interviewed about their experiences with the parent groups. Their comments, described below, reveal how difficult their children's behaviors had been to manage and the effect parenting skills training had on their parenting. As one mother noted:

> I tried all different kinds of stuff. Doctors gave me ideas, none of them worked, not even the medication…the things that I learned in these last couple of weeks, I wish I would've learned when he first started therapy.

Parents particularly appreciated the opportunity to meet and talk with other parents in the group. One mother explained, "they showed you another way. If that way didn't work, somebody else gave you another way to look at it." Another parent agreed that the peer support was particularly important: "With me hearing it from different people…who are going through what I'm going through…it made a difference." For these parents, a combination of learning the program principles and receiving the group support in applying them were important features.

All of the parents interviewed described marked improvements in their children's behaviors following the 12-week program, including comments such as, "She pays attention to me more," "He's happier," and "He responds to me more." The parent of one child with particularly challenging behaviors said, "I've seen a big change in him. Like, before, he wouldn't get in the cab to go to school in the morning, but now he gets in by himself." These parents specifically linked their child's improved behavior to both the new behavior management skills they had learned and the positive relationship they had built with their children using strategies discussed in the program. One parent described how using child-centered time, a central concept of the Chicago Parent Program taught in the first session, changed the atmosphere of the entire household:

> All my kids joined in, even the 16 year old. We played red light green light. The house was more calm. When I came in at night, everything went smooth…. I think he feels good about himself, I think he feels better knowing that Mommy's not always telling him to stop. I feel better. I had a void in my spirit, from telling him all the time [to stop misbehaving].

The parents also attributed their children's behavioral improvements and the enhanced quality of their relationships to the stress management skills they had learned in the last weeks of the program. One parent described how stress led her to use harsh punishments that harmed her relationship with her child:

> It made me be a more patient parent, more thoughtful and more logical…. [The program] taught me to stop and wait a minute before I react, because I was disciplining my kids in ways that's… not good… She pays attention to me more…I think she's better because I'm better.

A key advantage of parenting skills programs is that the strategies learned to help one child can be generalized to all of their other children. As one parent pointed out:

> The program actually worked, and it not only worked for the child that comes here… I use it for all my kids… The praising helped. I started off in the car one day, and I was praising [my son] for sitting still, and the rest of the kids said 'Ma, am I sitting still?' So it actually worked with all the kids instead of just one.

Skills parents learn can also generalize to other settings. Parents of clinic-referred children typically feel incompetent and unskilled and often avoid engaging with teachers and school staff. Yet parents who completed the Chicago Parent Program at their children's mental health clinic became confident in their new skills. They began sharing ideas with their children's teachers and with adult family members who also struggled with their child's behavior. One parent said, "I go to his school twice a week, and I take what I learn here, there. Now, she [the child's aide] don't scream, and it's the end of the school year, and she is not as stressed." Another parent believed that her child's improved behavior at school for the past 2 weeks was due to having taught her child's teacher the principles of the Chicago Parent Program, especially praising desired behaviors. Another parent said that she shared her parenting success stories on Facebook and also shared tips with her relatives: "I say, you should try doing this, you should try doing that. I say, girl, it works!"

These preliminary data indicate that the Chicago Parent Program is a feasible and acceptable parenting skills training program for low-income, ethnic minority parents of young children with significant behavioral problems and histories of substantial social adversities. These families represent a particularly important population of vulnerable families who have historically had difficulties accessing relevant and effective treatments for their children (Larson et al., 2011; National Institute of Mental Health, 2001). A randomized clinical trial of the effectiveness of the Chicago Program for treating disruptive behavior problems in low-income African American preschool children is currently underway.

Engaging Families in Parenting Skills Training Programs: Lessons Learned

Enrollment, Attendance, and Drop-Out in Parent Training Research

Although parent training programs have a strong base of support for their effectiveness in improving parent and child behavior, the potential impact has been limited by difficulties engaging parents in the intervention (Dumas, Moreland, Gitter, Pearl, & Nordstrom, 2008; Garvey, Julion, Fogg, Kratovil, & Gross, 2006; Ingoldsby, 2010). This includes problems related low parent enrollment and attendance rates and high drop-out rates, particularly among low-income populations. For example, a number of school-based parent training prevention studies have reported that only 10–34 % of parents eligible to enroll sign up to participate (Garvey et al., 2006; Thornton & Calam, 2010). Of those who do enroll in school-based parenting programs, overall attendance rates are typically less than 50 % of sessions; up to one third of parents who sign up never attend any sessions (Gross et al., 2009; Scott et al., 2010; Williford & Shelton, 2008).

One might speculate that low enrollment and attendance rates in school-based prevention studies are tied to perceived need. That is, parents of relatively healthy young children may not place a priority on attending a weekly parenting program when faced with other demands on their time. Indeed, the most common reason parents offer for not attending parent training programs is lack of time (Garvey et al., 2006). However, research shows that drop-out rates from parenting skills programs delivered to families who have sought

treatment for their children's behavior problems are also high (Kazdin & Whitley, 2003). In one parent skills training study targeting children at risk for or with histories of maltreatment, only 10 % of parents referred to the program completed it (Gershater-Molko, Lutzker, & Wesch, 2003). Thus, low participation rates in parenting skills training is a pervasive problem that remains poorly understood and difficult to prevent.

Low participation rates are a problem for multiple reasons. First, low enrollment and attendance rates diminish the power of parent training studies to determine their true effectiveness. Although a number of studies have shown that parents who attend more sessions show more benefit (Gross et al., 2009; Lyons-Ruth & Melnick, 2004; Pantin et al., 2003), these findings cannot be generalized because parents with high attendance may represent a different population than parents with poor attendance (e.g., higher functioning families may be more motivated to attend, children of high-attending parents may be more responsive to program strategies). Second, low enrollment and attendance rates mean families receive less exposure to the intervention, diminishing its potential for benefitting families in need. Third, low participation rates have a substantial effect on the cost of delivering the intervention regardless of whether the program is delivered in groups (i.e., fewer parents over which program costs can be spread) or in individual sessions (i.e., clinician time not reimbursed when parents fail to show for their appointments). Thus, low participation rates add further economic burden to community-based agencies and clinics already struggling with limited resources (Gross et al., 2011).

Barriers to Enrollment and Attendance

Many barriers to enrollment and attendance in parent training have been studied. These include logistic barriers (e.g., lack of time, transportation issues, needing to find childcare, schedule conflicts, competing demands) and psychosocial barriers (e.g., perceived irrelevance of the intervention, low social support, high levels of stress) (Heinrichs, 2006; Reyno & McGrath, 2006; Nix, Bierman, McMahon, & The Conduct Problems Prevention Research Group, 2009; Werba, Eyberg, Boggs, & Algina, 2006). For low-income families, these barriers may be magnified. In fact, enrollment and attendance rates tend to be lower among those at economic disadvantage (August, Lee, Bloomquist, Realmuto, & Hektner, 2003; Dumas & Wahler, 1983; Webster-Stratton & Hammond, 1990). Parents struggling with high levels of social adversity may not be able to dedicate the time and energy to enrolling in and attending an intervention at their child's school, despite their desire to be good parents.

To address some of the issues related to low enrollment and attendance, many programs have instituted strategies to address logistic and psychosocial barriers (Gopalan et al., 2010). For instance, many programs offer food and free childcare during parent group meetings, transportation to facilitate attendance, and phone reminders (Dumas, Begle, French, & Pearl, 2010; Gross et al., 2011; Guyll, Spoth, & Redmond, 2003; Heinrichs, 2006). Some have added motivational interviewing techniques to engage families in the intervention, reduce parent ambivalence, and promote motivation to change (Chaffin et al., 2009; Ingoldsby, 2010; Gopalan et al., 2010; Nock & Kazdin, 2005; Sterrett, Jones, Zalot, & Shook, 2010).

Qualities of the parent training program delivery are likely to also affect participation. Recent studies found a relationship between parent attendance and (a) characteristics of the individuals delivering the parent training, (b) the quality with which the program is delivered, and (c) the quality of the therapeutic alliance forged between the parent and clinician (Bloomquist et al., 2009; Breitenstein et al., 2010b; Thompson, Bender, Lantry, & Flynn, 2007). For example, Breitenstein et al. (2010a) found a moderate to large positive relationship (.45) between the degree to which Chicago Parent Program group leaders adhered to the intervention protocol and parent group attendance. Group leader skill was associated with parent satisfaction with the program. Similarly, the quality of the therapeutic

relationship between the parent and clinician has been positively correlated with parent attendance and greater improvements in parenting skills treatment programs (Kazdin & Whitley, 2006; Thompson et al., 2007). These findings suggest that despite the need for and the availability of programs that promote positive parenting and young children's mental health, we still have much to learn about how to make these programs attractive and engaging to the families they are designed to help.

Keeping Families Engaged

Getting parents to participate in parenting skills training programs is a challenge, particularly for parents from low-income communities. However, in our work with the Chicago Parent Program, we have found that if parents come to the first parent group session, they are 91 % more likely to return (Garvey et al., 2006). So it is important to engage parents from the very beginning. We have learned a number of important lessons about how to keep families engaged and have imbedded these lessons in our group leader training workshops. Five of these key lessons are briefly described below:

1. *Parents want to be good parents*. We have been studying for over 10 years what motivates low-income, ethnic minority parents of preschoolers to participate in a school-based preventative parent skills training program. The most common reasons parents give for attending a parent training program center on wanting to be better parents. Specifically, parents want (a) help managing challenging behaviors, (b) a better relationship with their child, and (c) to learn better ways to communicate with their children (Gross, Julion, & Fogg, 2001). In a recent study on parent participation (Gross et al., 2011), the most frequently endorsed motivation for enrolling in parenting skills training groups at their children's day care center was "looking for ways to be a better parent." It is interesting to note that the parents we interviewed rarely identified "reducing child behavior problems" as their primary motivation for participating (i.e., the key purpose underlying most parent training studies). Rather, they wanted to be better parents. Despite all of the challenges faced by parents raising young children in low-income, under-resourced communities, being a good parent remains the key motivation for participating in parenting skills programs. It is an important strength we can never lose sight of, even when their attendance wanes.
2. *Parents need to be viewed as experts about their children*. It is not uncommon for parenting skills professionals to view their role as one of "parenting expert," and that parents come to the parenting sessions to learn "correct ways" to communicate or discipline children. However, children are very different and the person who knows them best is the parent. In the Chicago Parent Program, group leaders are trained to be knowledgeable about the strategies taught in the program and to be expert facilitators of group discussion and problem-solving. However, they are also trained to respect parents as the experts about their children. As professionals, we can offer parents a set of options or "a bag of tricks" from which they can choose. As the experts of their own children, parents retain the right to use what they wish from a parenting skills program. In our experience, if parents feel that their role as "experts" of their own children is respected, they are more likely to engage in the program, acquire the confidence they need to try some new strategies, and support other parents struggling with similar issues.
3. *Parents want their values to be acknowledged, honored, and woven into the program*. Parents come to parenting skills programs with different values and beliefs about how children should behave. For example, many parents hold different behavioral expectations for boys than for girls. Parents also vary widely in their tolerance for child misbehavior, which misbehaviors can be ignored and which require a firm parental response. These values are important to parents and if they are not

acknowledged and respected, parents will typically choose not to return to the program.

However, we have found that most parents have not thought specifically about (a) what it is they value for their children, (b) what they are trying to achieve as parents, and (c) the degree to which their values and parenting strategies are congruent. These are important considerations for helping parents see the relevance of acquiring a new set of parenting skills. For example, early in the program, Chicago Parent Program group leaders ask parents "Ten, fifteen years from now, how would you like your child to feel deep down about himself or herself?" Across a diverse population of parents who have attended the program, the descriptions remain relatively consistent: they want their children to feel loved, competent, respected, smart, and good about themselves. The group leader writes these descriptions on a board for everyone to see and then asks, "How will you help your children come to feel this way about themselves? What are the behaviors you see in your child now, that you need to reinforce, that are going to help them develop this core sense of self?" These discussions are essential for parents because they help clarify what is important to them and how a parenting skills program can improve their parenting in ways that are consistent with *their* goals and values.

4. *Parents need a range of strategies from which to choose*. Because parents and children are all different, it would seem obvious that the same parenting strategy would not work equally well across all children. Yet, many professionals assume that "an evidence-based strategy," by definition, should work equally well for all children if parents only used it "correctly." Such assumptions make parents feel incompetent and devalued if the technique has not worked for them, leading many to drop out. However, "evidence-based" may only mean that the technique worked better than an alternative (though it may still not have "worked" for the majority of children).

It is essential that parenting skills programs offer parents options for achieving the same end. For example, it is important for parents to reinforce child behaviors they really value (e.g., sharing their toys with siblings, getting into bed at a designated bedtime). But there are many ways parents can do this—verbal praise, hugs, smiles, star charts, a "high five," and other strategies other parents might suggest. Indeed, some parents maintain that praise does not work for their children. Parents always have the right to reject the utility of a strategy and feel that their choice is respected, which is why it is important to have a range of alternatives. One of the advantages of parenting skills groups is that group leaders can solicit alternative ideas from other parents, alternatives that may be more acceptable to the parent because they are suggested by a peer.

5. *Parents need frequent reinforcement for their efforts to change*. Just as parents' use of differential attention helps to shape their children's behavior, it is essential that parents get a lot of positive attention for their efforts to try new strategies—regardless of whether those strategies work when parents first try them. This principle is particularly relevant for parents of children with serious behavior problems (those affecting children's social relationships at home and school and their academic success). Parents of children with serious behavior problems have already received a great deal of negative feedback from family members and teachers and are feeling frustrated and demoralized by their children's poor behavior. Most of the parents we see are already highly stressed by myriad personal and financial difficulties, making parenting even more difficult. Moreover, when parents first begin using the new strategies, children's behaviors often get worse before they get better, in part because the children are unfamiliar with their parent's new expectations. Thus, parents must receive a great deal of emotional support and verbal reinforcement for attending the parenting program, consistently practicing the new skills

they are learning, and persevering even when change seems slow or imperceptible. Parents who do not get sufficient support to offset their efforts will have difficulty engaging in parenting skills training and may prematurely drop out.

Conclusions

The Chicago Parent Program is a group-based parenting skills training program created in 2002 to address the needs of ethnic minority parents raising young children in low-income communities. The research to date supports its effectiveness for African American and Latino parents of children 2–5 years old. Specifically, quantitative and qualitative data indicate that parents derive important benefits from both the opportunity to learn new skills they can tailor to their values and childrearing goals and the mutual support and problem-solving that occurs during the group process. Most importantly, children of parents who participated in the Chicago Parent Program show significant improvements in their behavior based on parent report, teacher report, and independent observers.

Parenting skills training delivered in a group context has multiple advantages beyond the economic efficiency of helping multiple families with fewer mental health professionals. Done well, parenting skills groups may also diminish the stigma associated with seeking mental health services and minimize the potential for blame by normalizing children's behavior problems (McKay et al., 2011). Five strategies for ensuring that parents feel supported, engaged, and respected were described.

There remains a great deal to be learned about how to engage vulnerable families in parent training services. Participation rates in parent training are typically low and premature drop-out rates are high. These are significant problems affecting program impact, reach, and sustainability. Programs that are effective in the context of a clinical trial cannot be useful if parents do not attend. Thus, understanding and eliminating the obstacles to families getting the services they need remain an important area of study.

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Promoting Social Competence and Reducing Behavior Problems in At-Risk Students: Implementation and Efficacy of Universal and Selective Prevention Programs in Schools

Brian P. Daly, Elizabeth Nicholls, Richa Aggarwal, and Mark Sander

Introduction

Without effective prevention and early intervention, social, emotional, and behavior problems in children tend to worsen. For example, children in the early grades (i.e., kindergarten to 3rd grade) demonstrating poor social skills and/or behavior problems are at significant risk for continuing behavioral challenges and poor classroom participation which leads to poor outcomes such as low levels of academic achievement, dropping out of school, and compromised economic outcomes (Raver & Knitze, 2002; Snyder, 2001; Tremblay, Mass, Pagani, & Vitaro, 1996). Moreover, when children with behavior problems do not receive treatment, they are at increased risk of later conduct problems, antisocial behaviors, delinquency, and serious mental health problems (Caspi, Henry, McGee, Moffitt, & Silva, 1995). This is especially true for children of color or youth from low-income neighborhoods and/or households with lower levels of family income, as these students are at the greatest risk of experiencing psychosocial problems that negatively impact their development (Duncan, Brooks-Gunn, & Klebanov, 1994; Knapp, Ammen, Arstein-Kerslake, Poulsen, & Mastergeorge, 2007). Consequently, there is a compelling need for evidence-based prevention and early intervention programming that targets the social, emotional, and behavioral health concerns of at-risk students.

One method of promoting children's social and emotional functioning is through the implementation of prevention services in the schools (Storch & Crisp, 2004). Currently, however, there remains a lack of a consensus definition regarding the different levels of prevention and treatment, including applications to school-based mental health services (School Mental Health Alliance, 2005). Three of the more commonly described levels of prevention intervention include universal, selective, and indicated (Mrazek & Haggerty, 1994; Weisz, Sandler, Durlak, & Anton, 2005). Universal prevention programs seek to diminish risk factors and focus on broad populations of youth such as all students in a classroom, youngsters from an entire grade or school, or kids from a defined age range (Weisz et al., 2005). These programs may be implemented across multiple schools and are deliberately planned in a way that

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does not seek to specifically identify youths at elevated risk for social or emotional dysfunction. On the other hand, selective prevention programs focus on groups of children identified as at risk due to their sharing of a significant risk factor (Weisz et al.). The goal of selective prevention programs is to employ strategies that seek to reduce the common risk factor. Finally, indicated prevention programs target youth who express significant symptoms of a disorder but nonetheless do not meet diagnostic criteria for the disorder (Weisz et al.).

Evidence supports the positive impact of universal and selective school mental health prevention programs in addressing a range of emotional and behavior problems (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Rones & Hoagwood, 2000). For example, results from a meta-analysis of 177 universal prevention programs reveal that program participants evidenced significantly better outcomes on measures of academic achievement and social, emotional, and behavioral competencies as compared to control group participants (Durlak & Wells, 1997). Another meta-analysis evaluated 130 selective prevention programs for children and adolescents with findings indicating that such programs significantly reduced behavior problems while also improving social skills (Durlak & Wells, 1998).

Despite the benefits of early prevention services, economically disadvantaged and racial and ethnic minority children are often the least likely to receive needed preventative behavioral and social-emotional programming (Horwitz, Gary, Briggs-Gowan, & Carter, 2003; Lillie-Blanton, Rushing, & Ruiz, 2003). For example, African-American children often are considered the most underserved population with respect to these programs (Lindsey, Green, & Thomas, 2004), with data indicating that they are only half as likely to participate in these programs than their Caucasian peers (Gonzales, 2005). In the absence of preventative and/or early intervention programming, low-income and minority children are often left to receive substandard behavioral health services through the juvenile justice or welfare systems (Alegria et al., 2000). One of the primary advantages of providing school-based prevention programming includes increased accessibility to disadvantaged and vulnerable populations, better opportunities to engage parents and teachers in fostering the mental health of children, and significantly enhanced abilities for broad mental health promotion and the potential for cost-savings and long-term benefits (Weist, Evans, & Lever, 2003). Therefore, the delivery of evidence-based universal and selective prevention programming in the school by mental health personnel and educators is needed to help promote positive academic and mental health outcomes while also preventing any progression to more serious negative outcomes.

This chapter provides descriptions of universal and selective prevention programs that have been employed with at-risk children and seek to promote social competence while also reducing behavior problems. The descriptions focus on programs used with elementary and middle school students and include details of target goals, programmatic activities, implementation, and effectiveness. All of the programs described in the chapter have received support for being evidence based by at least one of the following sources: (1) the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidence-based Programs and Policies (NREPP; www.nrepp.samhsa.gov); (2) the Blueprints for Violence Prevention Program at the Center for the Study and Prevention of Violence, Institute of Behavioral Science, University of Colorado at Buffalo (www.colorado.edu/cspv/blueprints); (3) Child Link/TRENDS (www.childtrends.org/Links); or (4) the Office of Juvenile Justice and Delinquency Prevention (www.ojjdp.gov/mpg).

The programs described in this chapter do not represent a comprehensive list of all evidence-based universal and selective prevention programs. However, the reader is provided with a focused overview of illustrative programs that have received empirical support for at-risk students and can be delivered by school mental health personnel or teachers in the school setting (see Table 1). That being said, it is important to consider the following caveats: (1) the programs reviewed have mixed levels of empirical support

Table 1 Description of universal and selective prevention programs in schools

Program	Age range	Facilitator	Setting	Length	Target areas
Universal interventions					
The Incredible Years: Parent, Teacher, and Child Training Series[a,b,c,d]	2–12 years	Teacher, counselor, therapist	Classroom or pullout group	18–20 weeks	Enhancing social and emotional competencies; reducing behavior problems
Al's Pals: Kids Making Healthy Choices[a,c,d]	3–8 years	Teacher, school mental health professional, prevention specialist	Classroom	23 weeks	Developing social-emotional skills; decreasing aggressive or antisocial behaviors
The Good Behavior Game[a,c,d]	Beginning 1st grade	Teacher	Classroom	Academic year	Socializing children to the role of student; preventing/reducing aggressive, disruptive classroom behaviors
Second Step[a,c,d]	4–14 years	Teacher, counselor, school psychologist	Classroom	15–25 weeks	Promoting social competence; reducing impulsive and aggressive behaviors
I Can Problem Solve[a,c,d]	4–12 years	Teacher	Classroom	Academic year	Enhancing interpersonal cognitive processes and problem-solving skills
PATHS: Promoting Alternative Thinking Strategies[a,b,c,d]	Preschool through 6th grade	Teacher	Classroom	Academic year	Promoting socio-emotional competence; reducing behavior problems and aggression
Raising Healthy Children (Seattle Social Development Project)[c,d]	Elementary and Middle School	Teacher	Classroom	Academic year	Promoting positive youth development by reducing identified risk factors and preventing adolescent problem behaviors
Selective interventions					
Early Risers "Skills for Success"[a,c,d]	6–12 years	Teacher, designated school staff member	Summer day camp; after school pullout group	Summer, 6 weeks; after-school, academic year	Reducing aggression and disruptive behaviors in children at high risk of serious conduct problems
Social Skills, Group Intervention[a]	8–12 years	Counselor, psychologist, social worker	Pullout group	10 weeks	Building social skills and reinforcing prosocial behaviors in children with social skills deficits

[a]Considered an evidence-based program by the United States Department of Health and Human Services/Substance Abuse and Mental Health Services Administration's National Registry of Evidence-Based Programs and Practices (NREPP)

[b]Considered a model program by the The Blueprints for Violence Prevention Program at The Center for the Study and Prevention of Violence, Institute of Behavioral Science, University of Colorado at Buffalo

[c]Considered an evidence-based program by Child Trends' Lifecourse Intervention to Nurture Kids Successfully (LINKS)

[d]Considered a model program by the United States Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention

across the different sources; (2) the criteria by which different sources judge a program to be evidence based are not universal; (3) some of the reviewed programs are based on few studies or have heavily relied on outcome data from a single research laboratory; and (4) the measured aspects of what gets defined as negative behaviors and social competence vary significantly across the different studies and programs. All of these factors have considerably impacted implementation and evaluation in school settings and therefore should be taken into consideration when planning and selecting prevention programs.

Universal Prevention

The Incredible Years Program

The Incredible Years Program Series (Webster-Stratton, 1990) is a set of curricula for parents, teachers, and children aimed at promoting children's emotional and behavioral health while reducing behavioral, social, and emotional problems through the use of specific skill-building strategies. The children's program, known as Dinosaur School, is designed for use with children ages 2 to 12 years and consists of 18 to 20 2-h weekly lessons administered by a trained classroom teacher or therapist (Webster-Stratton, 2004). Each lesson uses a variety of activities including role-plays, games, group discussions, and vignettes to teach children about major program themes that include communicating feelings, having empathy for others, solving problems, being a good friend, and effectively managing anger (Joseph & Strain, 2003). The curriculum also emphasizes the development of academic skills, such as following classroom rules and listening to the teacher, which are reinforced using a reward system (Webster-Stratton, 2004). Dinosaur School can be administered in a variety of settings in the school, such as in the classroom by a trained teacher or as a small group program by a counselor or school psychologist. As such, Dinosaur School can be used as a universal or selective prevention program.

The Dinosaur School Incredible Years program is supported by research findings from several randomized control group studies indicating that program participants, including those who are considered socioeconomically or environmentally at-risk and/or display early-onset conduct problems, demonstrate significant reductions in the frequency and severity of problem behaviors, improved social skills, and enhanced problem-solving and conflict management skills (Webster-Stratton & Hammond, 1997; Webster-Stratton, Reid, & Hammond, 2004). Importantly, behavioral improvements were maintained when examined at 1- and 2-year follow-up (Webster-Stratton, Reid, & Hammond, 2001). In an evaluation of the classroom prevention program in which teachers served as group leaders, findings revealed that children in the intervention classrooms demonstrated significantly more prosocial responses to situations that involved conflict as compared to control children (Webster-Stratton & Reid, 2007). Finally, several independent replications that have included samples of Hispanic children (Barrera et al., 2002) and urban low-income preschoolers (Brotman et al., 2003) have also demonstrated improvements in social skills and reductions in negative behaviors.

Al's Pals: Kids Making Healthy Choices

Al's Pals: Kids Making Healthy Choices is a resiliency-based prevention program that seeks to enhance the social and emotional competence of at-risk young children (3–8 years of age) while also decreasing aggressive or antisocial behaviors by promoting self-control, problem-solving skills, and decision-making abilities (Geller, 1999). The curriculum, originally designed to help classroom teachers' work more effectively with young children from low-income, high-risk environments, consists of 46 lessons delivered twice weekly by a trained classroom teacher, school mental health professional, or prevention specialist (Lynch, Geller, & Schmidt, 2004). Each lesson consists of engaging activities such as music, games, and role-plays focused on topics that include (1) regulation of feelings and behavior; (2) the importance of making healthy choices; (3) bullying prevention; (4) being caring, cooperative, and respectful; (5) peaceful conflict resolution; and (6) improving coping

skills (Substance Abuse and Mental Health Services Administration [SAMHSA], 2008). Lessons are brief, lasting only 20 min each, with teachers being directed to reinforce key concepts during situations that occur naturally throughout the school day (Joseph & Strain, 2003). In addition, teachers regularly send materials home to parents in order to familiarize caregivers with material being learned in the program and also to suggest ways in which parents can foster or reinforce program concepts (SAMHSA, 2008).

Findings from a multiyear, multistate evaluation of the Al's Pals curriculum revealed that children from the intervention group, including ethnic minority students and those from socioeconomically disadvantaged backgrounds, demonstrated significant improvements in social-emotional competence and coping skills while also displaying reductions in antisocial or aggressive behaviors in the classroom as compared to children from the control group (Lynch et al., 2004). While these results are promising, replication studies for the Al's Pals curriculum have not been published in peer-reviewed publications.

The Good Behavior Game

The Good Behavior Game is a teacher-administered, group-oriented contingency program designed to prevent aggressive and disruptive behaviors among students within the context of a classroom's existing instructional curriculum (Barrish, Saunders, & Wolf, 1969). In terms of implementation, the classroom teacher spends the first 10 weeks of the school year observing students' behavior and then uses these observations to assign each child to one of several teams which are balanced by gender and classifications of demonstrated behaviors such as externalizing versus internalizing behaviors (SAMHSA, 2011a). Basic classroom rules are posted and announced during game periods three times per week, and teams are rewarded immediately if the group has four or fewer behavioral infractions recorded in a given period (Kellam et al., 2008). Over the course of the school year, game periods are increased and can reach up to a maximum of 3 h. Next, the teacher ceases to announce when the game is beginning so that timing and activities performed during game periods become less predictable and rewards are deferred until the end of the school day or week (Kellam et al., 2008).

Results from program evaluations that included children who were considered at risk due to socioeconomic disadvantage and/or already demonstrating symptoms consistent with early behavioral dysfunction indicate that students in intervention classrooms evidenced significantly fewer aggressive, disruptive, and/or inappropriate behaviors as compared to students in the control classrooms (Embry, 2001). Findings from a recent study of the Good Behavior Game conducted in an urban classroom with students came from impoverished backgrounds revealed significant reductions in disruptive behavior and improvements in on-task behavior (Lannie & McCurdy, 2007). Importantly, there is also evidence to suggest that gains in behavior for children that participate in the program continue well beyond the end of the program. Specifically, results from a longitudinal investigation of low-income, racially diverse adolescents revealed that males who participated in the program as first graders were less likely to have records of violent and criminal behavior at 14-year follow-up when compared to a control group (Kellam et al., 2008).

PATHS: Promoting Alternative Thinking Strategies

The PATHS: Promoting Alternative Thinking Strategies is a school-based prevention program composed of a set of curricula designed to promote socio-emotional competence while also reducing behavior problems and aggression. The program seeks to enhance children's social skills, self-control, responsibility, emotional awareness, problem-solving skills, and self-esteem (Greenberg, 1998; Kusche & Greenberg, 1994). The PATHS program has separate curricula for different age groups: PATHS Preschool, a selective intervention for children identified as cognitively delayed; the PATHS Turtle Unit, for use with kindergarten students; and the PATHS Basic Kit which is used with students in 1st through 6th

grade (Joseph & Strain, 2003; SAMHSA, 2007a). The PATHS Turtle Unit and PATHS Basic curricula consist of 131 twenty-minute lessons administered by trained teachers or counselors several times per week over the course of a school year either in classrooms or pullout groups (SAMHSA, 2007a). Each lesson consists of various activities that include modeling, role-playing activities, video presentations, and storytelling (SAMHSA, 2007a). Lessons are divided into three units (Readiness and Self-Control, Feelings and Relationships, and Problem-Solving), and each unit focuses on a particular skill such as identifying, labeling, and expressing feelings; managing feelings; impulse control; problem-solving and decision-making; self-awareness; delaying gratification; and communication skills.

The PATHS programs have been employed and evaluated in both regular education and special education classrooms that have included ethnically diverse samples of children. Results from a study of PATHS with first and second graders found that intervention students demonstrated enhanced ability to discuss basic feelings and also felt better able to manage their feelings (Greenberg, Kusche, Cook, & Quamma, 1995). Evaluation findings from a study of 2nd and 3rd graders revealed that the intervention group, as compared to the control group, demonstrated stronger gains in social problem-solving and emotional understanding (Greenberg & Kusche, 1997). Moreover, when employed with special education students in elementary school, teacher ratings indicated reductions in externalizing behaviors and depressive symptomatology for intervention participants as compared to children in the control group (Kam, Greenberg, & Kusche, 2004). The decreases in externalizing and internalizing behaviors were maintained at 2-year follow-up, but long-term gain was not noted for social competence (Kam, et al., 2004).

In recent years, the complementary aspects of the Good Behavior Game and PATHS have been integrated to form a comprehensive preventive program known as PATHS to PAX (Embry, Staatemeier, Richardson, Lauger, & Mitich, 2003). PATHS to PAX ("pax" being the Latin for "peace") utilizes various strategies to create and reinforce a school-wide focus on peaceful behaviors, actions, and conduct (Embry et al., 2003). For example, posters promoting peaceful behaviors and language are placed throughout the school, and teachers are urged to utilize nonverbal directive cues as opposed to raised voices (Embry, et al., 2003). In keeping with the community focus of PATHS to PAX, the program utilizes a slightly modified version of the Good Behavior Game known as the PAX-GBG. In the PAX-GBG, rather than having the teacher dictate rules to students, teachers and students work together to collaboratively define their concept of an ideal classroom and decide which behaviors are or are not in service of such a classroom (Domitrovich et al., 2009). The use of the PAX-GBG promotes a calm atmosphere in the school and minimizes classroom disruptions, which, in turn, allows teachers to present the PATHS curriculum fostering children's socio-emotional competencies (Domitrovich et al., 2009). Preliminary data indicate that a majority of teachers utilizing the PATHS to PAX system report ease of use as well as substantial impacts on students' self-control and attention to lessons (Domitrovich, Ialongo, Embry, & Greenberg, 2008).

Second Step

Second Step is a set of classroom-based curricula that while described as a violence prevention program also seeks to promote social competence and reduce impulsive and aggressive behaviors in children by promoting self-reflection, emotional awareness, and problem-solving skills (Committee for Children, 1997, 2003a, 2003b). Second Step, which is employed with children ages 4–14 years, can be administered by any individual with regular, approved contact with students including teachers, counselors, and school psychologists. The program contains separate curricula for students in preschool/kindergarten, 1st to 3rd grade, 4th to 5th grade, and middle school. Each grade-level curriculum contains between 15 and 25 lessons (35 min each) which feature a variety of activities including role-plays,

games, and group problem-solving activities based on stories featuring specific skills or problems (Fitzgerald & Edstrom, 2006). Individual lessons generally focus on the following program themes: (1) empathy training, in which children are taught to identify emotions, as well as their possible causes, in themselves and others; (2) development of impulse control and problem-solving abilities, in which children are taught to identify impulsive versus thoughtful responses to problems; (3) anger management, in which children learn to manage negative feelings constructively; (4) school success, in which children's learning skills are strengthened; and (5) prosocial behavior, in which students learn skills for being good friends (Committee for Children, 2002). Supplementary lessons cover material such as taking responsibility for actions, having respect for others, and being assertive (Fitzgerald & Edstrom, 2006).

Results from a program evaluation with elementary school students indicated that the intervention group demonstrated significant reductions in aggression and gains in positive student behavior and social reasoning as compared to peers in the control group (Frey, Nolen, Edstrom, & Hirschstein, 2005). In another study that included urban African-American children, teachers reported improved prosocial behavior for students after participating in the program; however, teacher-rated overall changes in aggression and impulsivity were not found (McMahon & Washburn, 2003). Cooke and colleagues (2007) studied the Second Step program across eight elementary schools and reported findings that revealed significant improvements in indices of social competence that include positive approach/coping, caring/cooperative behavior, and consideration of others.

I Can Problem Solve

The I Can Problem Solve (ICPS) program is a universal school-based set of curricula aimed at enhancing interpersonal cognitive processes and problem-solving skills in children ages 4–12 years (Shure, 2001). Separate curricula exist for preschool, primary, and intermediate elementary school students and are designed to be administered by a trained classroom teacher (SAMHSA, 2011b). The program uses stories, games, discussions, and role-play activities to enhance prosocial behaviors, self-esteem, and coping skills by teaching children to generate nonviolent solutions to interpersonal problems (Joseph & Strain, 2003; Shure, 2001). Individual lessons focus on specific topics related to pre-problem-solving or problem-solving skills including recognizing emotions, generating multiple solutions to problems, evaluating ideas, and predicting consequences (Shure, 2001). Because a major goal of the program is for students to perform problem-solving steps independently, each lesson (20 min) presents children with multiple opportunities to learn and exercise new skills, and the program stipulates that children, rather than teachers, must solve the problems raised in lessons (Joseph & Strain, 2003; SAMHSA, 2011b). The number of lessons is age specific: preschool (59 lessons), kindergarten and primary school (83 lessons), and intermediate elementary school (77 lessons).

In terms of research support, several studies with racially diverse preschool, kindergarten, and first-grade students reveal that participants in the I Can Problem Solve program, as compared to control groups of children, demonstrate enhanced interpersonal and cognitive problem-solving skills (Shure, 1993; Shure, 1997) and prosocial behaviors (Boyle & Hasset-Walker, 2008). Several international studies have replicated the findings of improved problem-solving skills and prosocial behaviors in Brazilian children with behavior problems (Elias, Martuano, Motta, & Giurlani, 2003) and in Turkish children (Dincer & Guneysu, 1997).

Raising Healthy Children (Formerly Seattle Social Development Project)

Raising Healthy Children, originally developed as the Seattle Social Development Project, is a universal, multidimensional prevention program that involves parents, teachers, and children working together toward the following targeted goals: (1) promoting elementary school students' communication, problem-solving,

and conflict resolution skills; (2) decreasing problem behaviors; (3) strengthening prosocial bonds; (4) enhancing attachment and commitment to school; and (5) decreasing risks for delinquency (Hawkins, Kosterman, Catalano, Hill, & Abbott, 2005). The intervention consists of multiple components: (1) the classroom, where teachers learn to practice proactive classroom management strategies, teach interactively, and emphasize cooperative learning; (2) parent training, in which parents are taught to effectively manage children's behavior, support academic progress, and reduce risks for substance abuse; and (3) the student component, in which children are taught communication, self-monitoring, refusal, and problem-solving skills (Hawkins et al., 2005).

The efficacy of Raising Healthy Children among at-risk students has been supported by several studies. For example, in a large study that included multiethnic students from high-crime, urban neighborhoods, those participants in the Raising Healthy Children classrooms demonstrated fewer self-destructive and aggressive behaviors, lower rates of substance abuse, improved social skills, enhanced school bonding, and improved achievement test scores relative to control classrooms (Hawkins et al., 2005). Students that received the prevention program also derived lasting benefit. For example, results of longitudinal studies indicate that by age 21, students from socioeconomically disadvantaged inner-city communities who participated in the Raising Healthy Children program demonstrated significantly lower levels of heavy alcohol use and substance abuse, fewer behavior problems, and lower numbers of sexually transmitted diseases as compared to nonparticipants (Hawkins et al., 2007).

Selective Prevention

While the universal prevention programs described above adopted strategies to address general risk factors in youth populations, selective prevention programs target groups of youth identified as having, or being at risk for, more significant problems. More specifically, these programs seek to identify populations that share significant risk factors for social, emotional, and behavior problems and then develop and employ strategies that prevent more serious dysfunction in the future (Durlak & Wells, 1998; Weisz et al., 2005).

Early Risers "Skills for Success"

Early Risers "Skills for Success" is a developmentally focused, competency enhancement program that targets kindergarten and first-grade elementary school students who are at high risk for future development of more serious conduct problems due to already demonstrated disruptive behavior, poor adjustment and social adaptability in school, and unsatisfactory academic performance. The Early Risers program applies both child- and family-focused interventions within a school setting with the stated goal of moving high-risk children toward a more adaptive early developmental pathway. In particular, the child-focused component (CORE) of the program has three parts: (1) Summer Day Camp, offered 4 days per week for 6 weeks, aimed at enhancing social-emotional skills education and training, reading enrichment, and creative arts experiences; (2) School Year Friendship Groups, offered during or after school, targeted toward the advancement and maintenance of skills learned over the summer; and (3) School Support, offered throughout the school year, intended to improve academic instruction and the children's behavior through case management, consultation, and mentoring activities (August, Bloomquist, Realmuto, & Hektner, 2007; Bloomquist, August, Lee, Berquist, & Mathy, 2005; SAMHSA, 2007b).

Numerous studies, which have included samples of children from culturally diverse, urban neighborhoods, have been conducted to evaluate the effectiveness of the child-focused Early Risers program, with findings consistently demonstrating improvements in school adjustment and social competence (August, Egan, Realmuto, & Hektner, 2003a; August, Lee, Bloomquist, Realmuto, & Hektner, 2003a; August, Realmuto, Hektner, &

Bloomquist, 2001; SAMHSA, 2007b); however, long-term follow-up studies have produced equivocal findings about whether these improvements persist over time (August, Egan, Realmuto, & Hektner, 2003b; August, Hektner, Egan, Realmuto, & Bloomquist, 2002; August, Lee, Bloomquist, Realmuto, & Hektner, 2003b). It is notable that no independent replications of this program have been published in peer-reviewed journals.

Social Skills GRoup INtervention (S.S.GRIN)

Social Skills Group Intervention (S.S.GRIN) is a social skills curriculum for children in grades three through five who display immature behavioral self-regulation and social skills relative to their peers (e.g., impulse control problems), are being rejected and teased by peers (e.g., bullying and victimization), or are socially anxious and awkward with peers (DeRosier, 2004; SAMHSA, 2011c). The program is primarily based on social learning and cognitive-behavioral theoretical perspectives, with an emphasis on the behavioral, cognitive, and emotional components of problem-solving. The intervention is implemented in small groups and is intended to improve children's peer relations by building basic behavioral and cognitive social skills, reinforcing prosocial attitudes and behaviors, and building adaptive coping strategies for social problems. Mental health professionals (e.g., psychologists, social workers, or school counselors) are trained in the program and then later use fully scripted lesson plans to implement S.S.GRIN 3–5 as a 10-week curriculum (one 60-min session per week). Sessions include modeling, positive reinforcement, and cognitive reframing to support the specific skills covered, as well as lectures, role-plays, brainstorming, games, and other activities. Although S.S.GRIN 3–5 has primarily been implemented in a school setting, the program also can be implemented in after-school, community, and clinical settings (DeRosier, 2007).

Evaluation of S.S.GRIN revealed that children in the intervention group, who were already demonstrating poor social skills and negative interactions with peers, demonstrated gains in peer liking, self-esteem and self-efficacy, and reductions in social anxiety relative to the control group (DeRosier, 2004, 2007; SAMHSA, 2011c). In addition, those children rated as especially aggressive at baseline demonstrated more significant reductions in aggressive and bullying behavior as compared to aggressive control children (DeRosier, 2004). When S.S.GRIN was evaluated at 1-year follow-up, the original gains were maintained and additional improvements included improved social acceptance and self-esteem and lower symptoms of depression and anxiety (DeRosier & Marcus, 2005).

Conclusion

Research has consistently demonstrated the positive role of social and emotional competencies toward successful youth outcomes, including academic achievement (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; Guerra & Bradshaw, 2008; Weissberg, Kumpfer, & Seligman, 2003). Unfortunately, many students are at risk for poor functioning in these domains secondary to the challenges of poverty and other stressors related to urban living. These challenges result in children being unlikely to receive needed services in the community (Alegria et al., 2000; Knapp, Ammen, Arstein-Kerslake, Poulsen, & Mastergeorge, 2007), reinforcing the need for delivery of evidence-based prevention programming in the school setting.

There are a number of key challenges facing the implementation of school-based prevention programs that include, but are not limited to, training concerns and sustainability issues. While most programs reviewed in this chapter can be implemented by either school or mental health staff, the ability to sufficiently train school staff to deliver these programs can be difficult due to limited resources. For example, training often requires a significant time commitment that is not always available to school personnel working under demanding schedules. In addition, many of the reviewed programs require training from a certified trainer, the cost of which may be prohibitive.

Moreover, as staff turnover is common in urban school districts, implementation training may be necessary on a rolling basis as opposed to a onetime event. In turn, multiple trainings require time, money, and staff resources that are already strained in low-income, inner-city schools. As such, it is recommended that schools identify challenges up front to aid in selection of a program that can still be effective within the indentified barriers. For example, several evidence-based programs offer online trainings that can be completed in multiple sittings (e.g., Second Step), which can help with time constraints and the need for multiple trainings. Schools, for their part, can reserve certain in-service days for training in the selected evidence-based program.

Because it is unlikely that programs will produce lasting benefit to schools or students without long-term maintenance, the question of sustainability is crucial when implementing an intervention. Sustainability generally refers to an organization's ability to support a program on an ongoing basis, with minimal or no assistance from external funding bodies. Grant money is one mechanism that frequently provides an initial source of funding; however, these funds are frequently time limited, so it is critical that schools develop long-term sustainability plans for implementing prevention programs. It is recommended that schools develop partnerships at multiple levels that can assist in planning for long-term sustainability. Such collaborations could occur with community organizations, colleges or universities, or corporations, all of whom may be able to assist with supplementing necessary resources for continued delivery of the selected program. For example, several universities in Philadelphia have partnered with nearby urban elementary schools to provide preventative programming at no cost to the schools or the district. In this particular model, psychology graduate students obtain course credit, as well as unique educational experiences, while delivering crucial preventive interventions to at-risk students, resulting in a "win-win" scenario for all involved parties.

One key research question that remains is whether school-based prevention programs are able to effectively engage parents and school staff in fostering the mental health of students. The importance of parental involvement in producing lasting behavior and emotional competencies is a major element in several of the programs reviewed above (e.g., Al's Pals, The Incredible Years, Raising Healthy Children), but it may be difficult to engage parents in these interventions secondary to factors such as time constraints, poor school-parent relationships, and parental financial stressors. Similarly, overstressed and under-resourced urban teachers may be unmotivated to fully commit to complex, time-consuming programs and may believe that such programming is likely to provide little benefit in a chronically chaotic school environment. In other words, buy-in on the part of stakeholders that include families and school personnel is a critical factor in determining program success. Therefore, more research is needed to establish best practices for parental engagement in these interventions, to investigate elements that influence acceptability among school staff and faculty, and to determine which variables improve implementation of these programs in under-resourced educational environments.

Further research is also needed to develop a matrix or decision-making guide to help schools identify their prevention and early intervention needs and then guide them in selecting programs (and possibly tailoring those programs) that will best meet their needs with the resources and time available. As such, future studies should critically examine which aspects of school organization and contextual factors either positively or negatively impact successful program implementation. And finally, more studies are needed that examine which specific elements of program delivery are able to effectively bridge the research to practice gap while also taking into consideration real-life challenges inherent in school settings. It is unfortunate that at-risk students most in need of school-based preventive services are also the least likely to receive high-quality programming. Professionals involved in education and school mental health must work together to ensure that schools serving at-risk student populations do not face insurmountable barriers in implementing these programs.

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Effects of Trauma on Students: Early Intervention Through the Cognitive Behavioral Intervention for Trauma in Schools

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Effects of Trauma on Students: Early Intervention Through the Cognitive Behavioral Intervention for Trauma in Schools (CBITS)

There is an increased awareness of the extent to which children are exposed to violence and other traumatic events. These traumatic events include direct or indirect exposure to violence in the home, at school, or in the community, terrorism, natural disaster, accidents, migration-related trauma, and traumatic loss and grief. It is estimated that as many as 60 % of US children were exposed to past-year violence, crime, and abuse exposure, including witnessing family and community violence (Finkelhor, Turner, Ormrod, & Hamby, 2009).

The potential negative consequences of exposure to traumatic events on the mental health of children and adolescents are well documented, particularly the development of posttraumatic stress disorder (PTSD) (Cooley-Quille, Boyd, Frantz, & Walsh, 2001; Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Jaycox et al., 2002; Singer, Anglin, Song, & Lunghofer, 1995; Stein et al., 2001; Yule, 2001; Zinzow et al., 2009). However, other anxiety problems (Finkelhor, 1995; Kennedy, Bybee, Sullivan, & Greeson, 2009), depressive symptoms (Cooley-Quille et al., 2001; Kliewer, Lepore, Oskin, & Johnson, 1998; Overstreet, 2000; Turner, Finkelhor, & Ormrod, 2010; Zinzow et al., 2009), and aggressive and delinquent behavior can also emerge following trauma exposure (Fowler et al., 2009; Garbarino & Kostelny, 1992; Guerra, Huesmann, & Spindler, 2003). The current chapter provides an overview of the effect of trauma on students, describes the Cognitive Behavioral Intervention for Trauma in Schools (CBITS), and summarizes research evidence and implementation experiences with CBITS.

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There is mounting evidence that exposure to violence and other traumatic events is directly associated with impairment in school functioning (Garbarino & Kostelny, 1992; Hurt, Malmud, Brodsky & Giannetta, 2001; Saigh, Mroueh, & Bremner, 1997; Schwab-Stone et al., 1995, 1999; Schwartz & Hopmeyer, 2003). School violence

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has been associated with reduced rates of high school graduation by 5.1 percentage points on average, and it lowers the likelihood that a student will attend college by 6.9 percentage points (Grogger, 1997). Unsafe and violent neighborhood and school environments have also been identified as strong predictors of lower attendance and grades (Bowen & Bowen, 1999; Hurt et al., 2001), disciplinary problems (Bowen & Bowen, 1999), and lower school competency (Hurt et al., 2001). In addition, youth exposed to violence have decreased social competence and increased rates of peer rejection and aggression (Schwartz & Proctor, 2000). Studies have also demonstrated an association between symptoms of posttraumatic stress and decreased IQ and reading ability (Beers & De Bellis, 2002; Delaney-Black et al., 2002). Additional studies in adolescents have found that children with maltreatment-related PTSD demonstrated deficits in attention, abstract reasoning, and long-term memory for verbal information compared to peers who were not maltreated (Beers & De Bellis, 2002).

PTSD and anxiety symptoms are a factor in the association between exposure to traumatic events and poor educational outcomes (Delaney-Black et al., 2002). Anxiety disorders in general have been associated with lower school performance (e.g., Langley, Bergman, McCracken, & Piacentini, 2004), which could be due to hesitancy to ask questions in class, inability to concentrate on schoolwork due to worrying, intrusive thoughts, or elevated stress and fatigue associated with avoiding anxiety-producing stimuli. Many youth with PTSD report concerns about being separated from loved ones; separation anxiety can lead to school refusal, truancy, and absenteeism (Kearney, 2003; Last & Strauss, 1990; Wood et al., 2012).

Schools are an important setting for supporting students whose posttraumatic stress is interfering with their mental health and school success. Ethnic minority children and adolescents have high levels of unmet need for mental health care with about 80 % of those who need care not receiving it (Kataoka, Zhang, & Wells, 2002). Latinos, in particular, are less likely than other ethnic groups to receive health services (McMiller & Weisz, 1996; Rew, Resnick, & Blum, 1997), and about 88 % of Latino youth who need mental health services do not receive care (Kataoka et al., 2002). Because schools allow for the provision of services to children who may not go to traditional mental health clinics (Garrison, Roy, & Azar, 1999), there has been a great interest in schools as a setting for mental health service delivery. In fact, 70–80 % of children who receive mental health services get these services in schools (Burns et al., 1995).

Cognitive Behavioral Intervention for Trauma in Schools (CBITS)

The Cognitive Behavioral Intervention for Trauma in Schools (CBITS) was developed due to growing concerns among school officials in the Los Angeles Unified School District (LAUSD) about the level of violence exposure and its impact on student well-being and learning (Jaycox, Kataoka, Stein, Wong, & Langley, 2005; Stein et al., 2002; Wong, 2006; Wong et al., 2007). In light of these concerns, in 1998, the district began a still ongoing partnership with a team of clinician-researchers at the RAND Corporation and the University of California, Los Angeles, to create and evaluate an early intervention program to ameliorate symptoms of posttraumatic stress disorder (PTSD) and build resilience among students. This kind of community participatory research partnership focused on program development, evaluation, and dissemination has been identified as particularly useful in the school mental health context (Stoiber & Kratochwill, 2000). In the case of CBITS, school partners wanted an intervention that: (a) was based on the best available evidence for treating posttraumatic stress; (b) could be tailored for a socioeconomically, ethnic/racially, and linguistically diverse student body; (c) was user-friendly; (d) could be conducted during a typical class period; and (e) could reach many students (Stein et al., 2002; Stein, Kataoka et al., 2003; Wong, 2006).

Cognitive-behavioral theory is the core theoretical model underlying CBITS. Cognitive

behavioral treatment (CBT) for trauma-related PTSD has been supported in controlled outcome studies for children and adults (e.g., Cohen, Deblinger, Mannarino, & Steer, 2004; Foa et al., 1999; March, Amaya-Jackson, Murray, & Schulte, 1998). In addition, CBT is a good fit with the school context given the ease of delivery in group format and similarities with other in-school practices. These include use of didactics and home-based practice, skill-building activities, and a behavioral focus. The CBITS intervention manual was written by one of the team members (a clinical psychologist and expert in CBT and trauma) and then refined using an iterative process with feedback from partners (e.g., school clinicians and staff, parents, community members, and academic partners) (Jaycox, 2003). The resulting program was then formally evaluated in partnership with the school district and delivered by school district staff.

Core Program Elements

CBITS is targeted toward students in grades four to eight who are exhibiting symptoms of PTSD following exposure to a traumatic event; however, it has been used with minimal adaptation with high school students as well. The intervention is comprised of 10 weekly group sessions, with 1–3 individual sessions dedicated to creating a trauma narrative (structured telling and processing of the memory of a traumatic event), and additional parent and teacher education sessions (Jaycox, 2003). CBITS is designed for delivery by a mental health clinician, and it incorporates common CBT techniques for PTSD symptoms, anxiety, and depression among children. Using a CBT approach, CBITS focuses on the linkages between maladaptive cognitive appraisals, emotional states, and behaviors. Specifically, CBITS helps children to develop more realistic cognitions about events and emotions that they are experiencing, employ techniques to cope with and manage difficult emotions both individually and through peer and adult support, and understand the impact of their behaviors on themselves and others. Skills are taught through activities and concrete examples, allowing students the opportunity to practice at home and in session using their own experiences. The program also emphasizes building resilience and social support through peers and caregivers. The key elements of CBITS are discussed below. Table 1 summarizes the material covered in each session.

Thoughts-Feelings-Actions Triangle

In the first CBITS session, students are introduced to a triangle that depicts the interconnections between thoughts, feelings, and actions as they impact the way we experience events and how we behave. Throughout the sessions, the triangle is reviewed in connection to the new skills the students are learning and provides an organizing structure through which students can continually be reminded of the linkages between the different session activities.

Psychoeducation About Common Reactions to Trauma

Students learn about common reactions to traumatic events through an interactive discussion. These reactions include symptoms of posttraumatic stress disorder (e.g., hyperarousal, recurrent thoughts about what happened, sleep problems, avoidance of trauma reminder) and other common responses such as guilt or shame, depression, irritability, relationship problems, and somatic symptoms. The goal of this session is to normalize the reactions to traumatic experiences, reduce stigma, and provide hope that CBITS groups will help students to deal with some of the reactions that may make them feel overwhelmed, out of control, or anxious. Students also take home a handout for caregivers that reviews session content. Students are encouraged to use this material to begin a discussion with caregivers and build further support at home. Parallel materials are reviewed in the parent and teacher sessions.

Relaxation Training

Relaxation is one of the first coping skills students learn in the group. The relaxation training combines progressive muscle relaxation, positive imagery, and deep breathing. By presenting

Table 1 Overview of CBITS sessions (Adapted from Jaycox, 2003)

Session type		Content
Child group	Session 1	Introduction to group: introductions, confidentiality, thoughts-feelings-actions triangle, disclosure of reason for being in the group
	Session 2	Psychoeducation and relaxation: common reactions to trauma, relaxation training
	Sessions 3 & 4	Cognitive therapy: link between thoughts and feelings, disputing negative, dysfunctional thoughts
	Session 5	Real-life exposure: building a fear hierarchy, beginning of approaching feared situations, alternative coping strategies
	Session 6 & 7	Group exposure to trauma memory: trauma narrative via imagination, writing, drawing, sharing
	Sessions 8 & 9	Social problem-solving: link between thoughts and actions, brainstorming possible solutions
	Sessions 10	Graduation: review, relapse prevention, graduation
Child individual	Sessions 1–3	Individual trauma narrative: exposure to trauma memory, planning for group sessions 6 and 7
Parent	Session 1	Parent education 1: introductions, thoughts-feelings-actions triangle, teaching children to measure fear, helping your child relax
	Session 2	Parent education 2: teaching children to notice their thoughts, to face their fears, to digest what happened to them, and to solve everyday problems
Teacher	Session	Teacher education: common reactions to trauma, thoughts-feelings-actions triangle, elements of the CBITS program, tips for teaching traumatized students

different relaxation techniques that can be used together or individually, students can decide what works best for them. Students are encouraged to practice relaxation daily at home through homework; the techniques can also be integrated into subsequent sessions of the group.

Cognitive Therapy

The goal of cognitive therapy is to challenge negative, unrealistic, or maladaptive thoughts that can lead to maladaptive feelings and behaviors. Students exposed to traumatic events commonly experience unrealistic negative beliefs about being safe in the world, trusting others, and their own competence and self-worth. Because these beliefs may interfere with daily functioning (e.g., exaggerated fears that lead to school avoidance), students learn strategies to challenge these negative beliefs through group activities, personal examples, and homework. These strategies are used throughout the intervention.

Real-Life Exposure

Students who have been exposed to traumatic events often avoid people, places, or things that remind them of the traumatic event or trigger feelings of anxiety. Students learn that anxiety can increase the more a situation is avoided (e.g., going to school becomes harder and harder with each day skipped) but that it decreases when a person is able to stay in the situation over repeated exposures without anything negative happening. With the help of the group leader, each student identifies something that he or she has been avoiding due to the trauma, and constructs a hierarchy of systematic steps toward his or her goal. Students work toward this goal throughout the remainder of the group. For students who are not avoiding anything related to the trauma, group leaders work with them to help identify non-trauma-related situations that cause anxiety (e.g., social or performance-related anxiety). It is important to make sure that planned activities are safe and that students are not attempting activities that may put them at risk of further trauma exposure. Communication with parents or other supportive adults is helpful at this stage. Students may also employ relaxation and additional anxiety reduction techniques (e.g., thought-stopping and distraction) as appropriate to support their efforts.

Exposure to Trauma Memory, Creating a Trauma Narrative

Besides exposing students to situations associated with the trauma, CBITS also includes exposure work in relation to the trauma memory itself. Students are encouraged to talk, draw, and write about the traumatic event that is bothering them the most through activities in the individual sessions and group work. These activities help students to process what has happened to them and also reduce feelings of anxiety about the memory. In the individual sessions (one to three depending on need), the therapist provides students with a rationale for exposure, explaining that talking about the trauma memory will help them to "digest" what happened, decrease anxiety, and allow them to feel more control. The student then tells the story to the therapist and repeats the process until feelings of anxiety diminish. The therapist monitors anxiety reduction via a "feeling thermometer," a visual tool used throughout CBITS where students can identify on a scale of 0–10 how anxious or upset they feel during situations. As the student recounts his or her story, the therapist checks in periodically to obtain a rating on the thermometer. If the student remains anxious about the trauma story after the first individual session, additional sessions can be scheduled. At the end of the individual session, the student and therapist plan what the student would like to share with other group members during group sessions. Two of the subsequent group sessions are devoted to imaginal exposure, drawing, and writing about the traumatic event.

Social Problem-Solving

The final component of CBITS is devoted to teaching students how to address real-life problems. This module builds on cognitive therapy and coping from prior sessions and provides a tool for addressing day-to-day life issues that may come up (e.g., peer problem, family issues, safety issues). In addition to encouraging flexible thinking by demonstrating how the way we think about a problem may lead us to different actions, students learn how to brainstorm solutions, weigh pros and cons, and choose a course of action.

Parent and Teacher Components

CBITS includes parent and teacher sessions that can be tailored to the needs of the families and schools. The two parent sessions provide parents with an overview of all of the major CBITS techniques and how they can support their children and encourage them to use the skills at home and in the future. In some cases, clinicians have expanded the parent sessions to cover additional topics of interest to the parents, such as positive parenting strategies and acculturative stress. The teacher session provides a similar overview of core CBITS skills as well as tips for supporting traumatized students in the classroom. Some of these include learning how to interpret behavior in a way that takes traumatic experiences into account, providing consistency, understanding that students may have idiosyncratic triggers or trauma reminders that make them anxious, and knowing when and how to seek support.

Cultural and Contextual Issues

A major strength of the CBITS program is that it has been delivered in diverse communities, often with multiethnic groups. For example, CBITS was originally developed with recent immigrant students from a range of cultural and linguistic backgrounds (e.g., Spanish, Korean, Russian, and Western Armenian speakers) and was evaluated with a sample of predominantly Latino students (Kataoka et al., 2003; Stein et al., 2003). Since then, CBITS has been implemented nationally with students from a range of cultures and contexts (e.g., urban, suburban, and rural communities; post-disaster contexts; African American, Caucasian, and Native American communities, among others; recent immigrant and refugee students) (Jaycox et al., 2010; Ngo et al., 2008). As clinicians are introduced to the program, CBITS trainers emphasize that group leaders should integrate student's beliefs and values and their cultural, linguistic, and contextual backgrounds into intervention delivery. The program manual contains standard examples for teaching the different skills; however, clinicians are also encouraged to use examples that resonate with the

students in their group, draw examples from the group members' experiences, build on community strengths, and integrate existing coping strategies from the local community (Ngo et al.).

Identification of Students

Notably, CBITS has typically taken a public health approach to the delivery of services by promoting screening to identify students in need of services. Although there are a number of ways to identify students for CBITS, such as assessment for trauma symptoms among new referrals or existing clients, classroom- or grade-level universal screening allows schools to reach students who are in need of services like CBITS but who may not exhibit the overt behavioral problems that typically lead to mental health referrals in schools (Stein et al., 2002). In the CBITS studies in Los Angeles, the team obtained active parental consent to administer a brief screening tool, the Child PTSD Symptom Scale, in order to identify students who had been exposed to traumatic events and who had significant symptoms of PTSD (Foa, Johnson, Feeny, & Treadwell, 2001). Based on the initial screening, students with exposure to a traumatic event and significant posttraumatic stress symptoms were interviewed individually in order to verify the screener and discuss possible participation in CBITS groups (Jaycox et al., 2005; Kataoka et al., 2003; Stein, Jaycox et al., 2003). Screenings can be conducted across an entire grade level, by targeting a classroom, or can be used individually with referred students.

Evidence of Effectiveness

CBITS has been evaluated through a series of partnered research studies in which CBITS was delivered by school clinicians. The first study pilot tested an 8-session version of CBITS through a quasi-experimental study where CBITS was delivered as part of a program for recent immigrant students. Although the program served students who spoke several languages, the evaluation study focused on the Spanish speakers due to sample size. Compared to a wait-list control group, students who received CBITS early in the school year showed significant reductions in symptoms of PTSD and depression (Kataoka et al., 2003). After this study, CBITS was refined, resulting in the addition of two sessions, and then tested in its current iteration.

A second study examined the effectiveness of CBITS in a general school population in two large middle schools via a randomized controlled trial with that used a wait-list control group. Students who received CBITS earlier in the school year had significantly lower symptoms of PTSD, depression, and parent-reported psychosocial dysfunction (effect sizes of 1.08, .45, and .77 SDs, respectively) compared to those in the control group (Stein, Jaycox et al., 2003; Stein, Kataoka et al., 2003). Additional analysis of the study data revealed that students who received CBITS early in the school year had significantly higher spring semester grades in math, but not language arts, compared to students in the delayed group. In addition, more students in the early CBITS intervention group had a passing grade (C or higher) in language arts by spring semester. A similar, but nonsignificant, trend related to math grades was found (Kataoka et al., 2011).

A third study examined CBITS in a post-disaster context in New Orleans after Hurricane Katrina. Students were screened in schools and were randomly assigned to either receive trauma-focused cognitive behavioral therapy (TF-CBT), which was delivered in community clinics, or CBITS, which was delivered in schools. Although students in both groups improved in their symptoms, uptake of the mental health care was much higher in the schools. Specifically, 98 % of students began the school intervention, compared to 37 % beginning at the clinic. Results once again highlight the value of delivering interventions in schools (Jaycox et al., 2010).

CBITS is currently listed on several national registries of best practices, including the National Registry of Evidence-Based Programs and Practices, Centers for Disease Control's Prevention Research Center, the U.S. Department of Justice's Office of Juvenile Justice and

Delinquency Prevention, the White House Conference on Helping America's Youth, and the Promising Practices Network. With funding from the Institute for Education Sciences, SRI International is currently conducting an experimental replication in San Francisco Unified School District (SFUSD). In addition, some sites have conducted local evaluations. Two sites that provided CBITS in Native American communities have reported positive mental health outcomes (Goodkind, Lanoue, & Milford, 2010; Morsette et al., 2009). Similarly, program evaluations conducted by groups in Wisconsin and New Jersey have documented improvement in student symptoms (Nadeem, Jaycox, Kataoka, Langley, & Stein, 2011).

Dissemination of CBITS

Since the development of CBITS, a range of school districts and community agencies working in schools have been using the model in their own settings. Clinicians implementing CBITS can access implementation support through the CBITS manual (Jaycox, 2003), in-person training and consultation from certified CBITS trainers, a free web-based training course (www.cbitsprogram.org), and online support materials (e.g., sample letters to parents and school staff, clinician tools). In addition, the CBITS team has developed educational videos for educators and parents that discuss the impact of trauma on academics and specific adaptations for students in special education or with low literacy, in faith-based settings (Kataoka et al., 2006), in foster care settings (Schultz et al., 2010), and for non-clinicians; these materials are available in both English and Japanese (Jaycox et al., 2009; Jaycox, Langley, & Dean, 2012). Handouts and worksheets are available in Spanish and disseminated through the website.

Service Delivery Models

Service models for CBITS have varied considerably both in the mechanism through which providers work and the way in which services are fiscally supported. CBITS has typically been delivered in schools by masters-level mental health clinicians (e.g., clinical social workers, licensed professional counselors, school psychologists, clinical psychologists, and other professionals). Clinicians providing services have worked as school-district-employed clinicians, community mental health agency clinicians colocated in schools, individual providers contracted by the schools to provide services, or as graduate student interns under the supervision of licensed clinicians. Services have been funded in various ways including school district sources, grants, or billing for services. Below we discuss some of the approaches that have been used to support CBITS services across the country.

Alignment with School District Programs and Structures

District-employed providers as part of school mental health and behavior support programs have delivered CBITS. For example, LAUSD has a long-standing School Mental Health Services Unit, supported through district general funds, that currently employs about 350 licensed clinical social workers. LAUSD clinicians provide CBITS groups to general educational students as part of a tiered public health approach to mental health services (e.g., Frieden, 2010). This effort, which also includes a structured model for training, supervision, and implementation support has resulted in the provision of CBITS groups to over 700 students.

In Jersey City Public Schools (JCPS), district-employed licensed clinical social workers in the Department of Special Education's Behavioral Support Program provided CBITS as part of the district's Response to Intervention (RTI) model. In line with provisions in the 2004 reauthorization of IDEA regarding early intervention services (EIS), RTI promotes early identification of students at risk for learning difficulties and the use of evidence-based interventions through a tiered system of supports (Reschly & Bergstrom, 2009). Although the primary focus of RTI is on instruction, there is recognition of the need for behavioral supports to promote learning (Reschly

& Bergstrom). Using the RTI framework, CBITS qualified as a second-tier-targeted intervention for students impacted by traumatic stress in this district.

Grants and Donations

In addition to traditional research grants, service grants obtained by school districts and community mental agencies have often been used to support CBITS. Project Fleur-de-Lis in New Orleans, for example, has been funded to provide CBITS and other trauma services through a combination of donations from foundations, individuals, and corporations, as well as support from nonprofit agencies (Cohen et al., 2009; Walker, 2008). This site and others have also been supported through grants from the Substance Abuse and Mental Health Service Administration's National Child Traumatic Stress Network. In Chicago Public Schools, a series of state and federal school-community partnership grants have been used to provide CBITS training and ongoing implementation support to one thousand district-employed and community mental health clinicians (Cichetti, 2011). An important facet of the work conducted by grant-funded sites has their focus on sustainability, which has helped sites to procure additional grant funding, solidify school-community partnerships, and develop local training capacity in support of CBITS. Over time, such strategies have allowed some setting to sustain CBITS beyond the life of a single grant.

State and Local Funding Streams

A third source of funding for CBITS has come from federal, state, and local government. One example is Medicaid, a federal and state entitlement program that provides health-care coverage to low-income Americans. Guidelines are set at the federal level; however, each state administers and structures its own Medicaid program, which can potentially support school-based services. For instance, local agencies in Los Angeles County have been able to bill for CBITS services provided in schools, a funding stream that is also being explored in New York City and other parts of the country. Individual states and municipalities may also have additional funding streams that could be used to support school-based services like CBITS. A notable example is funding made available to county mental health programs via Proposition 63, or the Mental Health Services Act (MHSA), in California. CBITS is one evidence-based program currently being implemented as part of prevention and early intervention services in Los Angeles and Riverside Counties.

Lessons Learned about CBITS Implementation

In addition to the identification of funding sources and alignment with school priorities, there are other factors that appear important to successful CBITS implementation. In a study of clinician and site director experiences with CBITS, we identified several important barriers to implementation: competing priorities for clinicians and schools, logistical barriers (e.g., time, space), lack of buy-in from school staff, and lack of parent engagement (needed for active consents for screening and treatment and attendance at parent sessions) (Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010). Although sites that successfully implemented CBITS have the same types of barriers as sites that did not, providers in "successful" sites were more likely to report having a network of professionals for support and funding (Langley et al., 2010).

Systematic reviews and conceptual models have highlighted critical factors in the uptake of new practices such as characteristics of the intervention (e.g., fit, ease of use), the support system (e.g., tangible supports, leadership), providers, organizations, and communities (e.g., Domitrovich et al., 2008; Feldstein & Glasgow, 2008; Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005; Greenhalgh, Robert, MacFarland, Bate, & Kyriakidou, 2004). In a recent examination of CBITS experiences, we identified five characteristics of the implementation support system used by sites that have successfully delivered CBITS on a relatively large scale (Nadeem et al., 2011). The first is *pre-implementation work,* which involves engaging stakeholders,

planning, setting up support structures, proactively addressing potential barriers, and establishing key partnerships that can support service delivery and support for providers in the field. Second, successful sites have provided staff with ongoing, structured *clinical and logistical supports* in the form of clinical supervision, consultation with CBITS developers and trainers, and support from site leadership. Third, local *promotion of fidelity* to the core components of the intervention has been critical. While sites typically have not used fidelity-monitoring techniques used in clinical research, review of core elements in supervision and tracking fidelity through self-ratings have been useful. Fourth, *documentation of outcomes* (student symptoms and academic progress, staff feedback) has been important in the continued use and expansion of CBITS services. Finally, successful sites have thoughtfully *tailored CBITS implementation supports* to fit the service context. This includes aligning CBITS with educational priorities (e.g., PBIS, RTI), building on existing local resources (e.g., local supervision resources and matching services to community needs) (Nadeem et al.).

Adaptations and New Directions

Support for Students Exposed to Trauma (SSET)

As an increasing number of schools become aware of CBITS and the impact of trauma exposure on students learning and education outcomes, there has been an interest in programs that can be implemented in schools without access to clinically trained providers. In response to this need, Jaycox and colleagues (2009) redesigned the original CBITS program for delivery by nonclinical staff, such as teachers and other school staff without clinical backgrounds. Like CBITS, Supporting Students Exposed to Trauma (SSET) is targeted toward students who have experienced a traumatic event and who have symptoms of posttraumatic stress disorder. To develop SSET, the team consulted with national experts on school programs and worked closely both with school staff unfamiliar with CBITS and clinicians familiar with the manual. The group reviewed each component of the program to develop language and structure that was a better fit for non-clinicians (Jaycox et al., 2005, 2009).

One adaptation is the use of a "lesson plan" format familiar to teachers. This includes step-by-step lessons with didactics, student activities, and a section on teacher preparation (materials needed, what to review ahead of time). Additional structure has been embedded into the materials in order to eliminate the need for clinical judgment or specific clinical training. For example, the individual trauma narrative sessions from CBITS where the student "processes" the trauma memory were eliminated from SSET due to their reliance on in-depth clinical training. Processing of the trauma memory, however, has been integrated into the lesson plan format in ways that would be comfortable for teachers and students. One such lesson has students write about their trauma exposure in a way that aligns with typical writing assignments for middle school students. For instance, students may write a newspaper story about what happened to them, including the answers to the questions, "Who? What? Where? When? Why? How?" (Jaycox et al., 2005).

SSET also includes tools for group leaders on when and how to access consultation through a student referral form and guidelines around suspected child abuse, intention to harm self or others, worsening of symptoms, family issues, and behavior problems evident during the group sessions (Jaycox et al., 2005, 2009). A pilot test of the program showed promising results, particularly for students with higher symptomatology. Further testing will be needed to establish the efficacy of the program (Jaycox et al).

Trauma-Informed Schools

Another important area of ongoing development involves integrating knowledge and practical approaches for supporting students exposed to violence and other traumatic events into the school culture. As sites have been implementing CBITS across the country, we have learned that

much of the pre-implementation planning involves education for school staff about the impact of trauma and learning, a key aspect of creating a trauma-informed system (Ko et al., 2008). Below we discuss a few emerging areas for supporting the creation of trauma-informed schools.

Raising Awareness Among School Staff and Providing Practical Tools

As noted above, in preparation for CBITS implementation, local providers often build support for their groups among administrators, teachers, and other school staff by outreaching and providing in-service and professional development to teachers and other school staff. Part of this work has involved educating staff about the impact of trauma and learning, helping staff view behavior through a trauma lens, and providing teachers with practical tips on teaching traumatized youth. For instance, predictability and routines in classroom activities can aid in creating a calm and supportive atmosphere. Teachers may also seek to avoid potential trauma triggers such as the use of loud noises in behavior management. Strategies like these are very consistent with behavioral classroom management strategies and school-wide positive behavioral supports (Sugai & Horner, 2006), all of which seek to support positive and calm learning environments for all students. In addition, the basic strategies of listening to students' concerns, allowing flexibility around activities, and knowing how and when to connect students with school mental health professionals are important (Jaycox, 2003; Schreiber, Gurwitch, & Wong, 2008).

Preparedness for Crises and Events Impacting the Entire School

The ongoing professional psychoeducation and universal strategies discussed above can help enhance schools' preparedness when crises or traumatic events impact the school. Additional approaches such as Psychological First Aid (PFA) may also be helpful for establishing support and educating survivors in the wake of a crisis. The purpose of PFA is to train school staff in key skills that can help students be aware of the potential impact of a traumatic event, and to help staff be able to respond appropriately. The following are the key goals of PFA: help students return to a calm and safe school environment; raise awareness about trauma-related reactions; enhance social connectedness with family, teachers, and peers; and establish systems to prepare students and teachers for future challenges (Kataoka, Langley, Wong, Baweja, & Stein, 2012). A model of PFA, specifically designed for schools, Listen, Protect, Connect—Model and Teach, is a five-step strategy designed to reduce distress and help students reengage in learning (Schreiber et al., 2008). For students who continue to struggle over time, programs like CBITS or SSET may be indicated.

Self-care and Vicarious Trauma

Staff working with traumatized students may experience secondary or vicarious trauma. Vicarious trauma refers to the impact on providers over time that results from witnessing or hearing about other people's traumatic experiences. Although not all staff experience this, it is possible for school staff and mental health providers to experience stress, fatigue, burnout, recurrent thoughts about students' traumas, or other symptoms (Bride, 2007; Dean et al., 2008; Figley, 2002). Awareness of this issue, self-care strategies (e.g., social support, personal time, relaxation), and consultation from colleagues can all be helpful.

Conclusion

Our experiences with CBITS highlight not only the value in addressing the needs of traumatized students in school settings but also the importance of the service context and the quality of the supports available for ongoing implementation and sustainability of services. The sample strategies used for funding CBITS reveal a complex and varied landscape characterized by the need for flexible implementation, blending of research and practice goals, and leveraging of existing resources and local strengths to support programs. From a research perspective, if CBITS and similar programs are to be sustained in school contexts, there is a great need to study trauma

interventions and their impact on school performance in this nation. This is particularly salient given that many students with low academic achievement are also those at high risk for trauma exposure. Future research on the achievement gap could also include investigation of the extent to which trauma-focused programs like CBITS may ameliorate some of the disparities in achievement.

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The Connection Between Out-of-School Time Programs and School Mental Health

Aidyn L. Iachini and Dawn Anderson-Butcher

The Role of School Mental Health Systems in Addressing Barriers to Student Learning and Promoting Healthy Development

Due to accountability structures created through the No Child Left Behind Act, schools across the United States are focused on maximizing students' academic achievement, healthy development, and school success (Adelman & Taylor, 2002; Anderson-Butcher, Lawson, Iachini, Wade-Mdivanian, & Bean, 2008; Anderson-Butcher et al., 2010a). While significant efforts have targeted the development of academic standards, the alignment of curricula to these standards, and the preparation of highly qualified teachers, schools are realizing that there are many significant *barriers* that impede students' ability to learn (Adelman & Taylor, 2002; Anderson-Butcher et al., 2008, 2010a, b). For example, poverty, family instability, poor and unsupportive school climates, and bullying all pose significant barriers to student learning. Unmet mental health needs, underdeveloped social and emotional skills, and poor physical health also pose unique challenges to learning in the classroom (Adelman & Taylor, 2002). Many students experience multiple nonacademic barriers simultaneously, further exacerbating challenges to success in school and healthy development. Research also continues to point to various protective factors or developmental assets that support healthy development and learning, such as school connectedness, academic motivation, and social competence (Anderson-Butcher, Amorose, Iachini, & Ball, 2011; Fraser, 2004; Search institute, 2007). Because of this, many schools also are striving to incorporate strategies in their designs to enhance student engagement and school climate, as well as strengthen students' social skills and promote family/parent involvement in school.

To comprehensively address barriers to learning and simultaneously build students' strengths and capacities, many schools are designing and implementing SMH systems to ameliorate barriers to learning and healthy development, as well as promote overall child well-being (Brener, Weist, Adelman, Taylor, & Vernon-Smiley, 2007; Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007; Weist, 1999). A variety of strategies, including prevention and promotion, early intervention, and treatment strategies, are implemented as part of these systems. These systems also make use of strategic community partnerships to acquire and link resources, services, and supports to students

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and families in need. Partnerships with parents/families are priorities in SMH systems, particularly as supporting and engaging families can extend the impact of school services and supports into the home environment. SMH systems also prioritize data-driven decision making, where data are continuously collected and monitored to guide teaching and learning, student interventions, program/service delivery, partnership development, and continuous improvement strategies (Stephan et al., 2007; Weist, 1999).

The demands on both schools and SMH systems are staggering. While SMH systems, however, prioritize a continuum of services, many SMH practitioners might find they spend a great deal of their time focused on crisis intervention and treatment (Bronstein, Ball, Mellin, Wade-Mdivanian, & Anderson-Butcher, 2011). This may limit the time and resources that can be directed towards other important aspects of SMH systems, including prevention/promotion, parent/family engagement, and partnership development. In addition, the time spent leading and coordinating all of these efforts and the energy needed to explore data that can help align services and supports with the most pressing student needs may be limited in some SMH programs.

Together, these complex challenges facing schools and SMH systems call for creative solutions. Given that the growing needs of students and families may not all be addressed within the confining hours of the school day, several authors recommend maximizing the contribution of out-of-school time (OST) programs to support and address these needs during nonschool hours (Frazier, Cappella, & Atkins, 2007; Iachini & Anderson-Butcher, 2012). Towards this end, OST programs can help support and expand existing SMH systems aimed at addressing barriers to learning and build protective factors that contribute to positive youth development.

Out-of-School Time Programs

Out-of-school time programs occur outside of the hours of the school day, including after school, during the summer, and on weekends. Examples of OST programs include sports/recreation programs, 21st Century Community Learning Center (CCLC) programs, Boys & Girls Clubs programs, YMCA/YWCA programs, faith-based programs, and other youth development programs. These programs offer an array of services and supports to meet the diverse needs and interests of the students and families they serve. For example, 21st CCLCs offer academic enrichment activities, youth development opportunities, and parent/family literacy and support programs as part of their designs. These programs are operated by schools or community agencies and require collaboration with at least one community partner (see Anderson-Butcher, 2004). Another example is the Boys & Girls Clubs, which offer education and leadership, sports and recreation, arts, as well as health/life skills opportunities as part of their designs (Boys and Girls Clubs of America, 2011).

These youth development settings are popular among children and youth, with estimates of more than six million children and youth participating in these OST opportunities (National Institute on Out-of-School Time, 2009). Oftentimes, however, school leaders and mental health professionals may be unaware or overlook these programs as potential mechanisms to extend the school day and support SMH priorities (Frazier et al., 2007). For school-based mental health professionals, this may not be surprising given national estimates that suggest only one-third of school districts support professional development opportunities focused on OST settings (Brener et al., 2007). Similarly, community-based mental health professionals also may not receive professional development regarding programs and services offered at individual schools and therefore also may be unaware of these programs.

The benefits of these programs offered in the nonschool hours are well documented. For instance, participation in OST programs contributes to social and emotional development and enhanced academic outcomes (Anderson-Butcher et al., 2011; Broh, 2002; Fredricks & Eccles, 2006; Iachini & Anderson-Butcher, 2012; Larson, Hansen, & Moneta, 2006; Rostad & Long, 1996). Given the value of OST programs, it is important to examine the untapped ways in which these mediums support and enhance traditional SMH

priorities. Here we document several ways, including how OST programs promote positive youth development and parent/family engagement. SMH strategies should maximize these contributions through partnerships spanning the school day and the OST.

Promoting Positive Youth Development

Many SMH systems implement a variety of evidence-based strategies in an effort to create healthy learning environments and promote overall student success and well-being. More specifically, many SMH systems create and promote safe and supportive learning climates for youth and offer prevention strategies and activities focused on skill building as part of their tier 1 primary prevention strategies. Additionally, many SMH systems offer more targeted early intervention strategies (tier 2 or secondary prevention) to students identified as needing additional supports. Each of these specific strategies, along with the role OST programs can serve in relationship to them, is discussed next.

Creating and Promoting Safe and Supportive Learning Climates for Youth

Growing attention is being directed towards creating structures and processes that foster student engagement and connectedness to school (Safe and Supportive Schools, 2012). For example, many schools are developing mentoring programs where students have the opportunity to develop strong meaningful relationships with caring adults. Some schools also are abandoning rigid disciplinary practices, such as zero-tolerance policies, in order to further promote student engagement in the school setting (Daly, Buchanan, Dasch, Elchen, & Lenhart 2010; McNeely, Nonnemaker, & Blum, 2002). Teachers, too, are implementing engagement-oriented strategies in the classroom that include experiential and individualized learning (Daly et al., 2010). A growing research base documents the impact of these strategies on students' overall feelings of school connectedness and positive youth outcomes (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; McNeely et al., 2002; Resnick et al., 1997). For instance, Anderson-Butcher (2010) found that program components that build identity through social development activities, foster belonging to and engagement with the OST program and school through rituals, traditions, and branding, and reinforce prosocial peers and norms contribute to enhanced school connectedness among program participants.

Several key design features of OST programs are critical towards this end. For example, OST settings are often viewed as enjoyable and fun (Anderson-Butcher et al., 2011). Many youth are excited to go to a sport practice or attend an after-school program. This excitement and intrinsic motivation to participate in these programs may then translate into an opportunity to enhance and strengthen youths' feelings of connectedness to school. Imagine youth on a sports team wearing their jerseys to school. This sense of pride can help foster an identity as a member of the school and often translates to students feeling more engaged and connected to the school environment.

Anderson-Butcher (2010) also suggested other key ways after-school programs can support school connectedness. For example, many programs hire teachers to work in OST programs and/or involve teachers in program planning. This helps link classroom learning to what students experience in the OST. It also allows students to have additional opportunities to develop meaningful connections with key adults. This also is true of many sports programs, where a coach of a sport team also is a teacher in the school. OST programs also can support and reinforce school behavioral policies as a mechanism to promote connections to school (see Anderson-Butcher, 2004). Adopting school behavioral policies as part of OST program designs helps provide consistent expectations of behavior across settings. It also helps create seamless transitions for students throughout the day from the in-school to the OST hours.

As a SMH practitioner, awareness regarding how OST programs can support and reinforce efforts to enhance school climate and foster student connectedness to school is critical. Research demonstrates that OST programs are resources that may be leveraged in support of these SMH priorities. Not only do OST program designs contribute to fostering connectedness, but key relationships youth form with OST program staff and leaders, who may also be hired as school staff, allow students further opportunities to develop relationships with caring adults and feel more connected to their school environment.

Offering Prevention Strategies and Activities That Focus on Skill Building

OST programs also contribute to promoting positive youth development by offering youth opportunities to strengthen and enhance key social and emotional skills. Many schools and SMH systems focus on enhancing students' social and emotional competence through preventative school-wide and classroom-based strategies. For example, many US schools integrate social and emotional learning (SEL) into the classroom, focusing on cultivating students' social skills, critical thinking and decision-making skills, and emotional and self-regulation skills (Collaborative for Academic, Social, and Emotional Learning, 2012). A recent meta-analysis of school-based SEL programs documents the impact these programs have on enhancing these competencies (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger 2011). Many schools also implement School-Wide Positive Behavior Supports (SWPBS), where primary prevention focuses on skill-building and competency development for all students (Sugai & Horner, 2009).

OST programs often target and enhance these same youth development outcomes. A growing body of research demonstrates that youth participation in OST programs is associated with enhanced social skills (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Durlak, Weissberg, & Pachan 2010; Elias & Haynes, 2008; Larson et al., 2006; Masten & Coatsworth, 1998). Several strategies OST programs implement help contribute to these improvements in social outcomes, including identifying the key social skills targeted by the program, designing activities that allow youth to practice positive social skills, and involving other key adults to support translation of these skills into other settings, such as at school, at home, and in the community (Durlak et al. 2010; Iachini & Anderson-Butcher, 2012; Nation et al., 2003; Sheridan, Maughan, & Huungelmann, 1999).

Beyond social competence development, another outcome often strengthened through participation in OST programs is the development of leadership competencies (Bartko & Eccles, 2003; DeBusk & Hellison, 1989; Hattie, Marsh, Neill, & Richards, 1997; Larson et al., 2006). In sports, for example, many youth have opportunities to serve in leadership roles (e.g., team captain) and exercise autonomy in decision making (Iachini, Amorose, & Anderson-Butcher, 2010). After-school and summer programs also provide youth these opportunities, and many are intentionally designed to provide youth with opportunities to make choices and decisions regarding program activities (Nicotera, 2008; Wilson et al., 2008).

OST programs also contribute to the development of a host of other skills and positive youth development outcomes targeted by SMH systems, including healthy emotional and psychological development as well as reduced engagement in problem behaviors (Anderson-Butcher et al., 2011; Durlak et al. 2010). While describing these outcomes in detail is beyond the scope of this chapter, please see Anderson-Butcher et al. (2011) for a comprehensive review regarding the contribution of sports to positive youth development and Durlak et al. (2010) for a review related to after-school programs.

Overall, the contribution of OST programs to prevention and skill-building activities is another point of convergence between SMH systems and OST programs. Students not only can learn and strengthen these skills during the school day, but maximizing relationships with OST program providers can ensure translation and reinforcement of these skills in the OST setting as well.

Offering More Targeted Early Intervention Opportunities for Youth Identified as Needing Additional Supports

Many SMH systems also focus on providing more targeted early intervention services to students identified as needing additional supports (Weist, Stiegler, Stephan, Cox, & Vaughan, 2010). Oftentimes, these are referred to as tier 2 or secondary prevention strategies. For example, students identified by teachers and other school staff as having social or behavioral challenges in the classroom and/or are struggling with learning are then referred to SMH practitioners and/or other school support staff to receive more intensive supports and resources (Weist et al., 2010). These early intervention supports can include one-on-one counseling and/or a referral to a group or program that provides targeted support around a particular student need. For example, students may be referred to academic assistance programs after a teacher has identified them at risk for failing a class. Or, perhaps a student is exhibiting acting out behaviors in the classroom related to problems with peers and is referred to a social skills group offered at school.

OST programs are oftentimes untapped resources that can support these early intervention SMH priorities. In fact, there is evidence to suggest that students most vulnerable to challenges related to learning and development oftentimes benefit the most from OST programs (Quane & Rankin 2006). As described above, many OST programs have targeted priorities related to academic learning and/or social skill development. Given this, youth experiencing struggles during the school day may be linked and referred to OST programs that align with a particular student need. As such, SMH providers may want to work directly with OST programs to ensure the continuum of care. They also might partner with school leaders, teachers, OST providers, and others to address prevention, early intervention, and treatment-related needs more comprehensively through expanded school improvement processes and designs (Anderson-Butcher et al., 2008). Additionally, some OST programs are designed specifically to support at-risk students. For example, an after-school sport program serving a group of at-risk students also may provide targeted homework assistance and tutoring as part of their programmatic design. Another example is the Challenging Horizons after-school program that provides academic and social interventions to students with attention deficit hyperactivity disorder (Evans, Schultz, DeMars, & Davis, 2011).

As SMH practitioners working with youth experiencing challenges at school, consideration of how OST programs can provide and/or extend early intervention efforts into the OST hours is important. For example, SMH practitioners might work collaboratively with OST program administrators to support student referrals to OST programs that align with student needs. SMH practitioners also might consider participating in OST program development meetings where priorities are identified and share commonly experienced needs within the student population that could be addressed through OST programming. In general, the design of many OST programs mirrors in-school early intervention supports, including group-oriented strategies targeting social and emotional skill development. Linking students to these resources as a way to extend learning can be an important strategy to consider, especially as a SMH practitioner facing limited time during the school day.

Engaging Parents/Caregivers and Families

Parent/family engagement is another key SMH priority that can be maximized through OST programs.[1] Within schools and SMH systems, engaging parents and families is critical for student success and well-being. Research demonstrates the developmental and educational benefits for youth when parents and families are involved, such as improved grades, higher standardized scores, enhanced social skills, and reduced internalizing and externalizing behaviors (Jeynes, 2007; Powell, Son, File, & San Juan, 2010).

[1] Please note that the term parent used throughout this section, and other parts of the chapter, is broadly defined to also include caregivers in a child's life.

OST programs offer another strategy for maximizing the relationship between schools and families. First and foremost, for many parents, OST programs provide free and/or affordable childcare. After-school programs provide supervised care between the end of the school day and when parents may finish with work. Particularly in the summer, OST programs may offer full days of safe and supervised care for parents.

Research demonstrates that OST programs also contribute to enhanced communication patterns between parents and children by increasing opportunities for parents and children to spend time together, as well as by offering opportunities for parents to develop mutual support networks with each other (Anderson-Butcher et al., 2011; Dorsch, Smith, & McDonough, 2009). Other OST programs provide direct services to parents as part of their programmatic design. And, yet others provide parents and guardians with opportunities to have meaningful leadership roles within the program. For example, some programs hire parent leaders to serve as a liaison to other parents. Other programs ensure parent representation at planning meetings.

Several other aspects of OST programs also lend themselves to engaging parents/families. The time of day in which OST programs are offered is one such important feature. Many parents may work during the hours of the school day, which can make it difficult for parents to come to school for meetings and other school activities. OST programs, by nature of the hours they are offered, oftentimes allow for more parents and families to be engaged. For example, OST programs offered on weekends allow for parents who work during the weekdays an opportunity to attend. Parents may also have strong relationships with OST program staff. These relationships also sometimes assist parents in connecting further with school personnel when addressing behavioral and academic needs of their children (Anderson-Butcher, 2010).

Another important feature of OST programs relates to their fun and welcoming environment. Parents and families may have a completely different experience walking into the doors of an after-school program compared to walking in the doors of a school building. Coming in and watching their child interact with other kids during a play-based social skill activity may be perceived as much more pleasurable than walking into a meeting with the principal and SMH practitioner around their child's behavior issues in the classroom.

As SMH practitioners, engaging parents and families oftentimes is a common challenge. Exploring mechanisms to connect with parents and families during the OST hours and bridge the connections into the school day is something to consider as efforts are made to strengthen parent/family engagement.

Getting the Parent Perspective: OST Program Contributions to SMH Priorities

So far, this chapter has documented several ways in which OST programs contribute to SMH priorities, including promoting positive youth development and supporting family/parent engagement. To further showcase the value of these programs for supporting schools and SMH priorities, parent perceptual data from Ohio are presented next and point to additional contributions of OST programs.

Two hundred and fourteen parents from seventeen different after-school programs in Ohio participated in an evaluation of programs serving their children. As part of the evaluation, parents completed the Ohio Quality Assessment Rubric Afterschool Parent Survey (Anderson-Butcher, Iachini, & Wade-Mdivanian, 2010). This 26-item survey assesses six areas of programmatic quality in after-school programs, including youth development, academic learning, parent/family engagement, communication with parents, safety, health, nutrition, and diversity. Parents responded on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Of the parents who participated, 82 % reported as mothers, 10.7 % as fathers, 4.4 % as grandmothers, 2.4 % as legal guardians, and 0.5 % as others. With regard to race/ethnicity, 60.4 % of participants identified themselves as White, 26.7 % as Black/African

Table 1 Scale means and standard deviations

Construct	Mean (SD)
Youth development	4.35(.50)
Academic learning	4.22(.64)
Parent/family engagement	3.73(.82)
Communication with parents	4.36(.69)
Safety, health, and nutrition	4.53(.52)
Diversity	4.33(.60)

American, 9.4 % as Others, 2.5 % as Spanish/Hispanic/Latino, 0.5 % as Mixed Race, and 0.5 % as American Indian/Native American.

Table 1 synthesizes parents' perceptions regarding the perceived contributions of OST programs to academic learning and child well-being, as well as their own engagement in these programs.

Parents also had the opportunity to write in qualitative comments related to the OST programs. These qualitative data were analyzed inductively for themes and subthemes. Overall, parents provided 239 raw data quotes regarding the strengths of their after-school program. Table 2 presents the overall themes and subthemes. The table also indicates both the number of different parents who mentioned that theme (i.e., number of respondents) and how many times they mentioned it (i.e., frequency of responses). Example quotes also are provided and point to the value of these settings for families, students, and the school.

Overall, parents' perceptions of OST programs, particularly as they relate to SMH priorities, were favorable. Parents perceive these programs as influencing youth development, as well as providing a safe and healthy environment for their children. They also report feeling as though these programs communicate with them and support them in their role as parents. Parents also noted the value and contribution of these settings for skill and knowledge building. For example, parents noted that OST programs contribute to student learning through providing additional and more targeted academic support. Parents also described how these programs enhanced students' social skills and provided opportunities for students to develop relationships with caring adults. Some benefits for parents/families also were noted. For instance, several parents mentioned how after-school programs help connect them with teachers and the school, as well as offered safe, engaging, and supervised environments for their children.

Together, these data highlight the value of OST programs in supporting and engaging parents and families in meaningful ways. These data also support the contentions of this chapter related to how OST programs promote positive youth development through creating safe and supportive learning climates, building students skills and capacities, and supporting vulnerable students who may need additional services and supports. In the end, schools and SMH practitioners can capitalize on these important outcomes by strategically connecting and linking with these programs and services offered outside of the school day.

Strategically Connecting to OST Programs and Developing Partnerships: Implications for School Mental Health Practitioners

This chapter began by discussing the overwhelming pressures and increasing time constraints on SMH practitioners. There are just not enough hours in the school day to address the myriad of complex challenges many youth and families experience. Because of this, it is critical to begin considering how to maximize OST programs that can extend services and supports to youth into the evening hours, on weekends, and in the summer. This is especially true considering that OST programs have many overlapping priorities with SMH systems and serve millions of children and youth across the country. This begs the question, then, on where to begin. Given the convergent and overlapping priorities of schools, SMH systems, and OST programs, it seems like more systematic and strategic connections between and among these programs and systems are critical to help support students and families both during the school day and in the OST. These connections also maximize available resources and supports,

Table 2 Areas of programmatic strength

Theme	Number of respondents (N = 214)	Frequency of responses	Example quotes
Educational learning opportunities and activities	*62*	*68*	
Homework assistance	40	42	"The after-school program provides homework assistance which is greatly appreciated"
In general	14	14	"My child has a place to go after school to help her learn"
Enrichment	5	6	"Provides great opportunities for cultural enrichment"
Tutoring	4	4	"The tutoring for my child"
Reading/math support	4	4	"I also love the fact that my daughter received so much help in reading and getting to the level she is at"
Preparing for standardized testing	1	1	"The prepping for the test"
Program in general	*59*	*62*	
Diversity of activities	28	29	"I like that the after-school program has a diverse schedule of activities"
Like the program	20	20	"I like the fact my child gets help that is needed after school"
Opportunities offered	6	6	"The ability to learn things that I can't teach him, i.e., chess, karate, golf"
Field trips	3	3	"My daughter really loves the field trips that she has experienced while attending the after-school program"
Hours of the program	3	3	"Like the hours"
Youth development opportunities and activities	*35*	*35*	
Relationships with staff	15	15	"The positive interaction between staff and students promotes a health environment for future relationships between child and concerned adult"
Relationships with peers	14	14	"Helps my child socialize outside of the school day and interact with other students"
Social skill development	4	4	"Teaches her how to communicate with her peers better"
Behavioral improvement	2	2	"The program helps kids with behavior"
Program environment	*24*	*31*	
Safety and supervision	12	13	"It gives my youngster activity after school in a safe and controlled atmosphere"
Engaging and fun	6	6	"Keeps the children engaged in positive activities"
Caring	4	5	"They really care about my daughter"
In general	4	4	"It gives my child a learning environment that they enjoy very much"
Structured	3	3	"The program is rigorous and challenging helping to give them structure"
Parent/family engagement	*20*	*22*	
General support	10	11	"They listen to our feelings and concerns"
Connection to teachers and school	6	6	"The after-school program is like a bridge between the students, school, and the parents"
Communication	3	3	"How the staff communicate to me, the parent"
Family nights	2	2	"They have several family nights"
Health and nutrition	*15*	*16*	
Physical activity	11	11	"Keeps my child active"
Meals/snacks	5	5	"Snacks are free to students"
Transportation	*5*	*5*	"The bus drops her off"

particularly given time constraints and oftentimes limited resources. Together, this points to the need to form strategic partnerships.

Here are some thoughts to consider as you commence this work:

- An initial first step might be identifying all of the OST programs serving youth within your school, school district, and/or community. Perhaps a list already exists, or perhaps there is a resource in your school that can share this information with you.
- Consider the ways in which the OST program(s) could help meet the needs of students and families in your school and likewise how you and the school could support the OST program(s). For example, as a SMH provider, you might think about whether you are able to co-locate in an OST program to provide services and supports to youth and families. Perhaps instead of working 8 hours (h) of the school day, you could shift hours to work 6.5 h during the school day and 1.5 h in the OST. Reciprocally, you might investigate whether OST program leaders are reinforcing similar social skills and behavioral expectations promoted during the school day, and offer suggestions about how these might be incorporated into their programmatic design. Table 3 provides a list of other key questions you might consider asking as you form partnerships with OST programs.
- As you begin to consider ways in which forming these partnerships could be mutually beneficial, initiating conversations and meetings to determine which of these strategies are feasible and realistic would be an important next step. Additionally, you might engage in common planning to discuss current needs within the school and the OST program and discuss ways in which resources can be shared.
- Once these relationships are developed over time, another next step to consider would be implementing these jointly developed and mutually beneficial strategies. Both formal and informal discussions might help determine and evaluate what is working well from both perspectives, along with what might need to be adapted and changed in the future.

Table 3 Key questions to consider in forming partnerships with OST programs

➢ Are the school-based OST programs supporting and reinforcing behavioral expectations maintained during the school day? If not, how might behavioral expectations be incorporated into the OST program design?
➢ Are there school staff that work within OST programs? How might these relationships be maximized relative to students on my caseload?
➢ What prevention activities are offered during the OST time? How do these activities align with the prevention strategies implemented during the school day?
➢ What youth development outcomes are targeted by specific OST programs offered at the school or in the community?
➢ What types of early intervention services are offered through the OST programs in my school or community?
➢ Are students identified as needing additional supports being linked and referred to OST programs in my school or community that could help support these needs during the OST hours?
➢ How are parents/families being engaged in OST programs in my school or community?
➢ How might information related to school mental health services and supports offered during the school day be incorporated into OST program designs?
➢ How might parent and family engagement strategies being implemented in the OST program be adapted for inclusion during the school day?

- It also is important to think about how SMH services and supports, as well as OST programs and activities, link back to the teachers, the classroom, and ultimately to student learning. As you begin to align SMH services with OST resources, collaborating with teachers and connecting it all back to classroom learning remain critical for ensuring the impact of these strategies on students' success in school and overall healthy development.

It is understandable that all of these steps may seem overwhelming at first. In light of that, you might consider which OST program or programs align best with SMH priorities and goals and start from there. Developing solid and meaningful relationships with even a select number of OST programs could greatly contribute to supporting student and families' needs. As you work to form strategic partnerships with OST program providers, it's important to consider how connections

with OST programs can leverage other critical resources and partnerships in support of SMH priorities. As discussed earlier, many OST programs offer an array of activities as part of their programmatic designs. To provide this diverse array of activity options, many OST programs partner with local community agencies and organizations. For example, a local art organization might be asked to come into an after-school program to lead a 5-week art class for OST program participants. Students at a local university might serve as peer mentors in a summer youth development program. Sports are another great example of an OST program that can help leverage community partnerships. Consider how many people attend school sporting events, including business owners, parents and families, and other community-based organizations. Through attending these events, these stakeholders may begin to develop a stronger relationship with the school and thus may turn into valuable partnerships that can bring in needed resources that align with SMH priorities (Anderson-Butcher et al., 2011; Iachini & Anderson-Butcher, 2012). Through cultivating relationships with OST programs, many indirect connections oftentimes are made with a host of other organizations that may be offering programs and services to students. These may even be relationships that could be difficult to cultivate otherwise, especially in light of time constraints.

Conclusion

In summary, OST programs and SMH systems emphasize many of the same priorities. To begin maximizing the contribution of OST programs to SMH priorities, it is essential to assess what OST programs exist and then develop and/or strengthen partnerships with these programs. As priorities and activities are more integrated and aligned across settings, the benefits for youth and families are clear. While initially this might take some time, maximizing both school and OST efforts can help promote child well-being and healthy development, create additional opportunities and supports for parents and families, as well as leverage existing community partnerships in a variety of ways. As the needs of students and families are growing and becoming more complex, this integrated approach relieves the pressure from schools to "do it all alone" and maximizes the support that can be provided to students and families during the school day and in the OST.

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Better Understanding and Intervening to Prevent Relational Aggression

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There has been increased attention paid to the reduction of aggressive behaviors among youth since the Columbine High School massacre in 1999, an incident which reportedly occurred in response to the perpetrators' victimization by peers (Larkin, 2009). The shocking display of extreme physical violence at Columbine influenced American researchers to focus on daily incidents of peer bullying and the implications of being an ongoing victim of peer bullying or abuse (Safran, 2007). More recently, harassment and bullying through nonphysical means (e.g., cyberbullying, relational aggression) has received media attention given the rash of suicides by youth who were being victimized by these forms of aggression. Although the media focus on nonphysical forms of aggression has only recently sparked the interest of the general public and lawmakers, research on these forms of aggression, particularly relational forms of aggression, is not a new phenomenon.

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What Is Relational Aggression?

Over the past two decades, the conceptualization of aggression has been broadened to include nonphysical aggressive behaviors (e.g., Björkqvist, Österman, & Kaukiainen, 1992; Crick & Grotpeter, 1995) and studies of these behaviors have steadily increased. Nonphysical aggression includes behaviors that serve to damage one's social standing within the peer group. Researchers have used several different terms to describe somewhat similar forms of nonphysical, aggressive behaviors. The most commonly used term is *relational aggression*, the hallmark of which is the manipulation of peer relationships in order to harm another's reputation (Crick & Grotpeter, 1995). These manipulative behaviors can be direct (e.g., excluding a peer from an activity when he or she tries to join or threatening to withdraw friendship) or indirect (e.g., starting a rumor "behind one's back"). In comparison, researchers have also used the term *social aggression* (Underwood, 2003), which is similar to relational aggression in that it often includes a manipulation of social relationships. Social aggression, however, is generally

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considered a broader term than relational aggression because it can also include negative facial expressions and forms of body language that do not necessarily indicate a manipulation of the social relationship. Finally, researchers have termed nonphysical aggression as *indirect aggression* (Björkqvist et al., 1992), which is thought to include nonconfrontational hostile behaviors (e.g., anonymously damaging someone's property) and may or may not involve a manipulation of the social relationship (see Goldstein, Tisak, & Boxer, 2002). While these three terms are sometimes used interchangeably, relational aggression can be differentiated by its clear reliance upon the manipulation of a relationship as the vehicle of harm, regardless of whether the action is direct or indirect. For the purposes of this chapter, we will focus on relational aggression.

Although relationally aggressive behaviors have historically been considered a female form of aggression, more recent research suggests that both boys and girls engage in relational aggression (Card, Stucky, Sawalani, & Little, 2008). Still, when a boy is aggressive, he is more likely to use physical means as opposed to relational means, whereas girls are more likely to use relational as opposed to physical means to cause harm. These gender differences may exist because the peer relationships of boys and girls differ. Specifically, research suggests that girls place more importance on close, exclusive, dyadic friendships, whereas boys usually have larger peer groups and are less likely to show exclusivity (Crick & Grotpeter, 1995; Maccoby, 2002). It is not surprising, then, that girls are more likely than boys to use a form of aggression (i.e., relational aggression) that damages others' peer relationships. Further, it also makes sense that girls have been found to be more distressed than boys by acts of relational aggression (Crick, 1996; Crick, Grotpeter, & Bigbee, 2002; Mathieson et al., 2011; Murray-Close & Crick, 2007).

Relational aggression is quite common across a range of ages from preschool to high school (Card et al., 2008) and has been found to be relatively stable throughout childhood (e.g., Crick, Ostrov, & Werner, 2006; Zimmer-Gembeck, Geiger, & Crick, 2005). However, the level of sophistication and directness of the aggression changes as youth become older. Specifically, relationally aggressive behaviors are more overt and direct during early childhood and become increasingly covert and complex as children develop. For example, a preschooler might demonstrate relationally aggressive behavior by covering her ears in order to show that she is ignoring another child. In contrast, relationally aggressive behaviors exhibited by middle school youth can be more subtle and complex, such as a 12-year-old encouraging her peers to give another girl the silent treatment as a way to get back at her for a perceived social slight.

Research over the past several decades has helped us to realize the significant impact of relational aggression on children's social and emotional development. It is no longer thought to be simply a "normal" part of growing up or a phenomenon restricted to a small group of bullies and victims. Although epidemiological research still needs to be conducted to determine the precise prevalence rates of relational aggression and victimization, it is clear that relationally aggressive behaviors impact the majority of the peer group. There is also a subset of these children, often termed "bully-victims," who fall into both categories, sometimes acting as the relational aggressor and other times finding themselves relationally victimized (O'Brennan, Bradshaw, & Sawyer, 2009). In sum, the majority of children are affected by relational aggression at some point over the course of their school years.

Perpetrators of relational aggression often demonstrate a number of characteristics including the following: (1) a tendency to infer hostility in negative social situations in which the provocateur's intent is unclear; (2) emotional arousal difficulties; (3) peer relationship difficulties, including high rates of peer dislike and rejection; (4) internalizing challenges such as depression, anxiety, and loneliness; (5) externalizing behaviors; and (6) a number of psychological issues as one reaches adulthood such as eating disorders and borderline personality features (Crick, Murray-Close, & Woods, 2005; Mathieson et al., 2011; Werner & Crick, 1999). In contrast, although they are often disliked by their peers, a sizable number of relational aggressors are also

quite socially influential. For example, some of these youth are perceived as being popular and even as being peer group leaders (Cillessen & Rose, 2005; Waasdorp, Baker, Paskewich, & Leff, 2013). This complex mix of characteristics makes intervening with relational aggressors quite complicated, as programs need to recognize and address their social challenges while also finding more appropriate ways in which they can demonstrate positive influence among their peers.

Victims of relational aggression experience concurrent adjustment problems such as poor peer relationships and externalizing difficulties (Cullerton-Sen & Crick, 2005), truancy and academic difficulties (Buhs, Ladd, & Herald, 2006), and increased drug use (Sullivan, Farrell, & Kliewer, 2006). Being relationally victimized is also associated with internalizing problems, such as depression, social anxiety (Dempsey & Storch, 2008), emotion regulation difficulties, and maladaptive social-cognitive processes (Rudolph, Troop-Gordon, & Flynn, 2009). Finally, children categorized as "bully-victims" as described above are often the most maladjusted (O'Brennan et al., 2009). This list of significant psychosocial difficulties associated with relational aggression underscores the importance of intervening early to reduce its prevalence and its impact.

Relational aggression also has a negative impact on the larger school climate. In schools where there is more relational and physical aggression, there is a lower sense of safety and more frequent disruptions to classroom learning (Goldstein, Young, & Boyd, 2008; Waasdorp, Pas, O'Brennan, & Bradshaw, 2011). Unfortunately, there are several factors that contribute to the prevalence of relational aggression in schools. First, teachers who believe that their direct efforts to curb relational aggression are likely to be unsuccessful are less likely to intervene (Bradshaw, Sawyer, & O'Brennan, 2007; Waasdorp et al., 2011). Further, if multiple teachers are relatively inactive when they witness relationally aggressive behaviors, it can become extremely hard to change these student behaviors. Moreover, studies have shown that some relationally aggressive youth are socially popular and influential within the peer group, and therefore a climate of social tension and unease may be perpetuated by these youths' behaviors (Cillessen & Rose, 2005; Waasdorp et al., 2013). In addition, children may conclude in these situations that there is little to be done about the relational aggression they experience and/or witness. While there are clear sanctions for the overt behaviors characteristic of physical aggression, the more subtle acts of relational aggression (i.e., damaging a peer's reputation by spreading rumors or by not including a child in peer group activities) are harder to identify and prove and thereby more challenging to sanction. These behaviors are indeed more insidious, however, so despite their sometimes covert nature, an increasing number of schools are developing policies and procedures for handling relational aggression.

In response to the impact of relational and physical aggression and bullying on school climate and safety, many states have mandated that schools implement policies and/or programming to address bullying behaviors (Limber, 2011). Although this mandate is needed, it often times has also prompted quick responses by schools, resulting in the implementation of bullying prevention policies and programs that have limited evidence to support their effectiveness (e.g., Ttofi & Farrington, 2011) or that have not been adapted to meet the specific needs of the school (Leff et al., 2007). For example, setting a zero-tolerance policy for bullying shows no effect on reducing bullying and may inhibit reporting of bullying, yet many school administrators continue to apply this type of approach (Sherer & Nickerson, 2010). Unless carefully chosen, programs may not address all forms of bullying (i.e., relationally aggressive forms), may not be culturally or developmentally adapted for the students, may not address bullying from a systems standpoint (e.g., they only focus on the perpetrator), or may require a higher level of resources and commitment than the school may have at their disposal. Clearly school personnel have many issues to consider when selecting a relational aggression prevention or intervention program. The next section highlights several empirically supported programs designed to reduce relational aggression.

Recent Review of Relational Aggression Programs

A systematic review of relational aggression prevention and intervention programs was recently published as part of a special series appearing in *School Psychology Review* (Leff, Waasdorp, & Crick, 2010). This study used a systematic keyword search of the main educational and psychological databases in order to identify empirically supported programs designed to prevent and reduce relational aggression and related behaviors. This extensive search revealed nine relational aggression programs that were subsequently reviewed. These included (1) the *Early Childhood Friendship Project* (Ostrov et al., 2009), which is a classroom-based prevention program designed to reduce physical and relational aggression and victimization for 3–5-year-olds; (2) the *You Can't Say You Can't Play* Program (Harrist & Bradley, 2003), which helps kindergarten teachers enhance classroom climate by enforcing a non-exclusion rule ("You can't say you can't play with us"); (3) the *I Can Problem Solve (ICPS)* Program (Shure, 2001), which is a long-standing curriculum-based universal prevention program comprised of 80 twenty-minute sessions for kindergarten and primary school age youth that was recently evaluated for its impact on relationally aggressive behaviors (Boyle & Hassett-Walker, 2008); (4) the *Walk Away, Ignore, Talk, Seek Help* (WITS) Program (Leadbeater, Hoglund, & Woods, 2003), which is a Canadian-based school-wide prevention program that attempts to have schools, families, and communities work together to implement strategies to prevent relational victimization; (5) *Making Choices: Social Problem-Solving Skills for Children* (Fraser, Day, Galinsky, Hodges, & Smokowski, 2004; Fraser et al., 2005), which is an indicated intervention addressing social information processing deficits in 3rd through 6th grade aggressive students; (6) the *Friend to Friend* (F2F) Program (Leff et al., 2007; Leff et al., 2009), which is a culturally adapted social problem-solving and relational and physical aggression reduction group intervention for 3rd through 5th grade urban African American relationally aggressive girls; (7) the *Second Step* Program (Van Schoiack-Edstrom, Frey, & Beland, 2002), a well-known classroom-based curriculum that was originally designed to improve children's social skills and decrease their problematic behaviors and that has recently been evaluated for its impact on attitudes that support relationally aggressive behaviors (Van Schoiack-Edstrom et al.); (8) the *Social Aggression Prevention Program* (SAPP), a universal prevention program for girls that uses a small-group format (e.g., groups of girls complete the ten session program together) and was developed to decrease 5th grade girls' levels of social aggression while improving their empathy and social problem-solving skills (Cappella & Weinstein, 2006); and (9) *Sisters of Nia* (Belgrave et al., 2004), which is a small-group intervention program addressing gender roles, ethnic identity, and social interactions among early adolescent African American girls. Although each of these programs could be considered highly promising, there are still a number of limitations to many of the programs. For instance, none of the programs meet the criteria for being considered *efficacious* according to the standards articulated by the Society for Prevention Research (2006). As such, the programs require more systematic evaluations of program effects using randomized procedures including active control groups that can account for the nonspecific aspects of treatment. Further, some of the programs would benefit by examining the impact of the program across well-validated, multi-method, multi-informant outcome measures. Finally, few of the programs monitored treatment fidelity and program acceptability; given these are crucial elements in evaluating interventions (Leff, Hoffman, & Gullan, 2009), more programs need to examine these factors.

Since the time of the review, studies on several additional programs that address relational aggression and related cognitions and behaviors have been published. First, *The Steps to Respect* Program is a classroom-based bullying prevention program for 3rd through 6th graders. A recent study demonstrated that the program

was associated with less malicious gossip perpetrated on the playground during school recess relative to an active/wait-list control ($d = .53$), although there were no associated changes with rates of malicious gossip victimization on a separate measure (Low, Frey, & Brockman, 2010). Second, the *Preventing Relational Aggression in Schools Everyday* (PRAISE) Program is a 20-session classroom-based prevention program that teaches 3rd and 4th grade urban African American youth about social problem-solving, empathy awareness, perspective-taking skills, and what to do as the bystander of aggression (Leff et al., 2010). This program demonstrated strong effects for increasing all youth's knowledge of problem-solving and anger management strategies and for decreasing aggressive girls' (and all girls') levels of relationally and physically aggressive behaviors as compared to similar aggressive girls (and all girls) in a control group (Leff, Waasdorp, Paskewich et al., 2010). Third, Verlaan and Turmel (2010) recently worked with the Quebec Ministry of Education to develop a brief universal program comprised of three workshops to raise elementary students' and teachers' awareness of relational aggression. Preliminary findings suggest that this program may have improved participants' knowledge for specific aspects of relational aggression. Future research on this program needs to replicate and expand study findings (e.g., examine input on behavior) while using a more stringent research design (e.g., use of randomization and a control group). Fourth, the *KiVa anti-bullying* program has been developed at the University of Turku and was funded by the Finnish Ministry of Education. It includes both universal and indicated components in order to prevent and decrease multiple forms of bullying and victimization among 1st through 9th graders (Kärnä et al., 2011; Salmivalli, Kärnä, & Poskiparta, 2011). Initial findings suggest that the program resulted in a 40 % decrease in rates of victimization (e.g., verbal, physical, exclusion, cyber) among students in the program, as compared an 11 % decrease among similar students in control schools (Salmivalli et al.). In sum, each of these newer programs holds promise for reducing relationally aggressive behaviors, attitudes, and/or related behaviors and characteristics. However, similar to the nine programs reviewed in the recent consideration of relational aggression programs (Leff, Waasdorp, & Crick, 2010), these newer programs also require replication in more controlled studies including randomization to experimental treatment and alternative/active treatment control groups.

Important Considerations for Schools and School-Based Mental Health Professionals

In this next section we will illustrate a number of important considerations for school health professionals when determining which program will best meet the needs of their school.

Choosing Programs That Are Developmentally Appropriate for the Target Group

When schools are selecting a program, it is important to base their decision on the degree to which the program takes into account the cognitive ability and form and/or function of relational aggression of their target population. For example, a school serving young children (i.e., preschoolers and kindergarteners) would want a program that addresses the direct relationally aggressive behaviors (social exclusion and ignoring others) that are typical at this age. Some programs that do this include the "*You Can't Say You Can't Play*" Program (Harrist & Bradley, 2003), which helps teachers apply a rule to encourage all students to play together, and the *Early Childhood Friendship Project* (Ostrov et al., 2009), which uses puppets to help engage young children in learning early prosocial behaviors and understanding the harm of relational and physical aggression. In contrast, it may be more appropriate to take a social cognitive retraining approach (Crick & Dodge, 1994) if the target population is school age youth (3rd–6th graders) because youth at this age have the cognitive skills to

understand and practice the important social cognitive steps involved in problem-solving (Crick & Dodge, 1994). Specifically, in the social cognitive retraining model, youth are taught the importance of identifying warning signs that they are becoming upset or angry, learn to remain calm and better evaluate others' intentions, and learn to consider the strengths and limitations of each potential response in a social conflict situation. This approach is espoused by programs such as Making Choices Program (e.g., Making Choices Program, Fraser et al., 2004; Friend to Friend, Leff, Gullan et al., 2009; PRAISE, Leff, Waasdorp, Paskewich et al., 2010; Second Step, Van Schoiack-Edstrom et al., 2002). Interestingly, there are relatively few programs available to address relational aggression and victimization among adolescents. For instance, although *Sisters of Nia* (Belgrave et al., 2004) has been developed for early adolescents, the program is focused almost exclusively upon helping African American females better understand and appreciate ethnic identity formation, gender roles, and African culture and is therefore less relevant for reducing aggressive behaviors. The *Second Step* Program appears to be promising for adolescents, as suggested by findings that the program was associated with a change in 6th–8th graders' *attitudes* towards physical aggression, social exclusion, and verbal derogation (Van Schoiack-Edstrom et al., 2002). More extensive research is needed on the use of *Second Step* with adolescents, including whether attitude change translates into behavioral improvements. In general, the development and validation of relational aggression programs for adolescents is presently an underdeveloped area of study.

Developing Champions for Change Within the School and Community

Given the time and labor intensity of some relational aggression programs, the potential interference with academic instruction time, and the support needed from diverse school staff in order for the program to be successful, it is critical to identify a program champion within the school and/or community (Leff, Waasdorp, & Crick, 2010). For instance, with the exception of the *ICPS* Program (Shure, 2001), which has 80, twenty-minute sessions, most programs designed to prevent relational aggression have ten to twenty sessions lasting approximately one class period. Program champions can play an invaluable role in advocating that the promotion of social and emotional development is a worthy investment of class time given the association between relationally aggressive actions and a negative school and classroom climate. Program champions can also articulate the meaningfulness and utility of the program and how it is a good match for the school. They can be key supporters of school staff during program delivery. An effective program champion is a school leader who is well respected by school administrators, teachers, lunchroom supervisors, and parents/community members, as this can facilitate support for the program and successful integration of the program into the school as a whole. The use of program champions is supported by interesting research by Atkins et al. (2008), which found that partnering with well-respected and influential teachers (i.e., *key opinion leaders*) is an effective strategy for building broad support for school-based programs and is a promising avenue of future research.

Alternatives to Classroom-Based Programming

A number of programs utilize small-group formats for social-emotional learning (SEL) instruction, so as to be able to provide more individualized programming to high-risk youth and/or to protect classroom instruction time (*SAPP*, Cappella & Weinstein, 2006; *Making Choices*, Fraser et al., 2004; *Friend to Friend*, Leff, Gullan et al., 2009). Although indicated interventions can have limited applicability to other groups (e.g., *F2F* and *SAPP* are designed specifically for girls), a small-group format that is well linked to classroom instruction may be more acceptable than an intensive whole-class format for teaching social skills, prosocial behaviors, and ways of responding without using relational and physical aggression.

That being said, there are special considerations when conducting group interventions, including making sure that the group leaders are well trained and that they prevent any negative behaviors within the group from being reinforced, given some evidence that aggressive youth may make each other's behaviors worse over time (Dishion, McCord, & Poulin, 1999). The *F2F* Program accounts for the latter concern by ensuring that 25 % of group participants are chosen for inclusion because they do *not* have difficulties with relational and physical aggression and instead tend to use more prosocial skills when interacting with peers (Leff et al., 2007). Including these prosocial peers reduces the likelihood that relationally aggressive behavior will be reinforced within the group, and it also sends a message to the school and community that relationally aggressive behaviors are a concern for everyone, not just for a small group of perpetrators or victims.

The Need for Multicomponent Social-Ecological Approaches to Aggression Prevention Programming

Drawing from the related peer bullying prevention literature, it is relatively clear that program success depends in large part on how well a program is integrated across different aspects of the school and/or community context (Espelage & Swearer, 2011). Thus, it seems crucial for relational aggression programs to target changes at the student, teacher, school, and community levels. Two relational aggression prevention programs that best illustrate this important approach are the *WITS* Program (Leadbeater et al., 2003) and the *KiVa* Program (Salmivalli et al., 2011). For example, *WITS* is a multicomponent program that incorporates a common language across settings so that multiple social agents (e.g., parents, teachers, police officers) can reinforce the same message with youth about the importance of engaging in prosocial and appropriate social interactions as opposed to relational and physical aggression (see Leadbeater & Sukhawathanakul, 2011). Further, the use of literature as a medium for promoting peer responsibility and to decrease relational victimization is an innovative way in which to blend social-emotional with academic learning. The *KiVa* Program is a multicomponent anti-bullying program that combines a universal prevention component that helps teachers and parents teach students important lessons related to peer interactions (e.g., the different physical and nonphysical forms of bullying and what students can do together to help confront these issues), with an additional indicated intervention for children at high risk for bullying or victimization (Salmivalli et al., 2011). Although the program has not yet been fully evaluated and/or field tested within the United States, it holds great promise for future research and training efforts in preventing relational aggression through its use of a multilevel school-wide approach and its ongoing large-scale implementation within Finland.

Recognizing the Importance of Program Acceptability and Implementation Fidelity

Given the increasing recognition of the challenges associated with peer relational and physical aggression across the country, many school districts are looking for the *ideal* program to apply in *all* schools within their district. While this may work well in some cases, it is important to recognize that bringing in empirically supported programs, such as the ones mentioned in this chapter, is not sufficient in and of itself. Program success also depends upon how well the program goals are matched to the needs of the particular schools, whether or not the program is accepted and valued by school staff, students, and parents, and how well the program is implemented. For instance, an extremely comprehensive program that can only be partially implemented or implemented in a manner that is not consistent with program guidelines may not have the same beneficial effects that have been found in systematic research investigations of the program (see Leff, Hoffman, & Gullan, 2009). Thus, it is essential that school personnel choose programs they can feasibly implement and monitor for fidelity. They should keep in mind

how the program can be slightly modified to best meet the needs of the particular school and community, while continuing to be implemented in a systematic manner that appropriately presents all core content. Through the use of questionnaires, observations, and rating scales, school psychologists and counselors can help schools determine over time how well the program is accepted by key school stakeholders (students, teachers, and administrators), how feasible the program is to conduct, and how well the core process and content (i.e., procedural integrity) variables are able to be implemented. These important considerations can help bridge the gap between research and practice.

Addressing the Barriers to Relational Aggression Intervention

Unfortunately, school administrators, teachers, and school psychologists experience several barriers to carrying out anti-bullying practices. For example, a recent survey of school psychologists highlighted barriers such as conflicting priorities, a perceived lack of time, and lack of trained staff (Sherer & Nickerson, 2010). Due to the links between bullying or relational aggression and lower academic achievement (e.g., Juvonen, Wang, & Espinoza, 2011), it is clear that programs to reduce relational aggression must be given a high priority, especially those that embrace a whole school approach. Given the aforementioned barriers, the success of such programming is clearly contingent upon the buy-in of school administration and teachers and how well school psychologists and school-based health professionals are able to educate all the stakeholders in the school about the impact of relational aggression and the need to intervene (Dake, Price, Telljohann, & Funk, 2004; Sherer & Nickerson, 2010).

A lack of time on the part of teachers can also be a barrier to aggression prevention programming, particularly because teacher noninvolvement can dampen intervention effects. Specifically, intervention effects have been found to be more profound when administrators allocate time and resources for teachers or counselors to instruct the children in a formal curriculum aimed at preventing or reducing relational aggression, such as through the types of programs outlined in this chapter. This can be particularly true when the teacher serves as a primary or co-facilitator of the curriculum because their involvement makes it more likely that the concepts and skills will be discussed again with the children throughout the day, reinforced, and better integrated into the students' overall school experience (see Leff et al., 2007; Leff, Gullan et al., 2009; Leff, Waasdorp, Paskewich et al., 2010). Further, teachers are in a unique position to discuss with students the specific conflicts they have observed, helping them to apply their new knowledge and coping strategies. Involving teachers would therefore increase the likelihood that the school's climate and tolerance for relational aggression will change in meaningful ways.

Because adequate time and resources on the part of teachers, counselors, and school psychologists are often barriers to systematic aggression prevention programming, it becomes very important that schools keep in mind feasible alternatives. For example, when time and resources are limited, more simplified school- and classroom-level interventions can still be implemented. These can include the creation of classroom rules that prohibit relational aggression, the creation of a system for tracking and reporting relational aggression, and the formation of a school committee to raise awareness of the issue of relational aggression. These simplified interventions can address common barriers to school-based relational aggression programming and can be quite useful in educating parents, students, and teachers about the problems that occur because of relational aggression at school and strategies for preventing and reducing these behaviors (Leff, Waasdorp, & Crick, 2010; Sherer & Nickerson, 2010).

Next Steps for Research on Relational Aggression Interventions

Although there has been much progress over the past 10 years in the development and evaluation of a number of relational aggression prevention programs, more research is still needed. First, more programs should be developed to

equip adolescents and young adults with skills to successfully handle relational aggression both in interpersonal relationships and in romantic relationships. Second, more research is needed to investigate the feasibility of multicomponent social-ecological programs, given prior research suggesting that programs simultaneously intervening with all youth, at-risk students, teachers, and parents are most likely to be successful (Ttofi & Farrington, 2011). Clearly, the research evidence suggests that programs that address relational and physical aggression at the individual, classroom, school-, and community-wide level are more likely to be effective. However, balancing this with ensuring that the programs are engaging to students and teachers and feasible to implement within the busy school day is also important. Third, as mentioned previously, relational aggressors have a complex array of characteristics including sometimes being quite popular and influential while at the same time being highly disliked by their peers. As such, more programs need to incorporate opportunities for relational aggressors to exhibit positive influence and leadership among their peers (Leff, Waasdorp, & Crick, 2010). Fourth, very few relational aggression programs have examined whether treatment gains are maintained over time or are sustainable in school and community settings once the research trial has ended. These are crucial next steps in relational aggression intervention research. Fifth, some researchers have assumed that programs should be tailored to particular gender and/or cultural groups in order to help these groups more successfully handle relational aggression. However, more research is needed to empirically address this question. Sixth, some programs have been designed under the assumption that one program is sufficient to address both relational and physical aggression, but this has not been examined empirically and as such is an important area of future research. Seventh, methods for increasing and documenting program fidelity are clearly needed for relational aggression programs. Curricula should include guidelines by which program implementers can assess the quality of their implementation and their adherence to the program as it was designed. Finally, research is needed to better understand cyber forms of aggression and bullying (Dempsey, Sulkowski, Dempsey, & Storch, 2011). Specifically, the field can benefit from learning if "cyber bullying" is another means of manipulating a peer's social standing (i.e., relational aggression) or if it is something entirely different. Regardless, more research must be conducted to develop strategies for integrating cyber- and on-line bullying prevention within more traditional programs designed to decrease relational and physical aggression and victimization.

Summary

While there has been considerable interest in developing programs that take into account relational forms of bullying and victimization, much work remains to be done. The development and initial validation of engaging and innovative programs addressing relational aggression suggest that researchers are making important strides in recognizing the harm associated with relational aggression and victimization. Our hope is that over the next 5–10 years, more systematic research will be conducted that will help to differentiate which of these programs holds the most merit when implemented within different types of school and community settings.

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Part III

Youth and Family Engagement and Empowerment

Partnering with Youth in School Mental Health: Recommendations from Students

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Strong partnerships involving schools, community systems, and families are critical in moving toward comprehensive and high-quality mental health programs and services for all students (Weist, 1997). Such partnerships are a foundational value in school mental health (SMH), with strong emphasis on the critical role of students in building, sustaining, and continuously improving programs and services (Christenson & Sheridan, 2001). There are many benefits to partnerships that emphasize strong family and youth participation in SMH, including enhanced collaborative decision-making, family engagement, and positive developmental outcomes for students (Epstein & Van Voorhis, 2010; Henderson & Mapp, 2002). Involving youth and families as partners in SMH is also consistent with federal priorities (U.S. Department of Education, Planning, & Evaluation, Policy Development, 2010), which emphasize consumer- and family-driven mental health care that encourages meaningful involvement of families in all aspects of service provision as recipients of care.

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Documented efforts to engage families in SMH has received considerable attention (e.g., Epstein, Coates, Salinas, Sanders, & Simon, 1997; Lowie, Lever, Ambrose, Tager, & Hill, 2003); however, efforts to involve youth directly in shaping programs and services need further consideration. This is in spite of the recognition that, as service recipients, students should also be involved in influencing SMH programs and services (Friensen, Koroloff, Walker, & Briggs, 2011). National organizations have also identified youth involvement and leadership as a key priority (e.g., National School Boards, 2011), yet little evidence exists to provide guidance on how youth can and should be involved as unique partners and a critical voice in developing and implementing SMH programming. One important way to engage students is to solicit and value their perspectives on youth mental health issues, including needs, supports, and services to inform the development of SMH programs and services.

In this chapter, we discuss the impetus for involving youth in SMH and a unique method for obtaining their perceptions. Further, in imploring this approach to engaging youth to inform SMH efforts, we present qualitative data from a survey developed to obtain the perspective of high school youth around SMH services and resources, as well as facilitators and barriers to existing services. Specifically, the youth survey provides information about the problems they face in schools, their awareness of resources,

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suggestions for school mental health programming, and willingness to use services. We highlight how such data can be used to better address the needs of students, reduce stigma, and increase involvement of youth in programs and services in schools.

Call for Youth Involvement

As reflected in other chapters in this book, SMH has gained momentum in recent decades, transforming child and adolescent mental health services in many ways. In particular, SMH has facilitated a commitment to a much stronger focus on school-family-community partnerships characterized by authentic, mutually beneficial, collaborative relationships (Weist, 1997; Weist, Paternite, & Adelsheim, 2005). These partnerships are intended to ensure that youth and families help to guide programs and services toward enhanced relevance and effectiveness. However, as mentioned above, literature on key aspects of these partnerships, specific strategies that promote success, and challenges faced in developing and sustaining strong partnerships is extremely limited. As a result, strong youth and family engagement in SMH remains more of an aspiration rather than a well-operationalized everyday practice.

The National Assembly on School-Based Health Care (see nasbhc.org) and the National Community of Practice (NCOP) on Collaborative School Behavioral Health (see http://www.ideapartnership.org/) are two organizations that were the impetus to the development of guidelines on promoting strong family and youth collaboration in SMH programs and services. NASBHC supports the development, expansion, and improvement of school-based health centers (SBHCs) in the USA (see www.nasbhc.org). These SBHCs offer a range of health care in schools including medical physicals, treatment of acute illness, and assistance for student management of chronic illnesses and increasingly include mental health services, with emotional/behavioral problems representing the most frequent reason for referral for services (Weist, Goldstein, Morris, & Bryant, 2003). Recently NASBHC participated in and led a School-Based Health Care School Mental Health Capacity Building Partnership (SMH-CBP), funded for 5 years through a cooperative agreement with the Centers for Disease Control and Prevention (Stephan et al., 2010). This work focused on development of strategies to enable educational systems and community partners to operate in a more comprehensive, responsive, and effective way with development and implementation of SMH programs and services. The SMH-CBP strategies include provision of training, technical assistance, information sharing, materials development, technology transfer, or funding. An early phase of the SMH-CBP work involved completion of a qualitative focus group study with a diverse array of stakeholders in four states (MD, MO, OH, OR) to identify critical factors of SMH capacity building. Four distinct focus groups were conducted in each state, with three of the groups including diverse professionals from the fields of education, family advocacy, health professions, mental health and social services, youth development/advocacy, and business. A fourth group in each state consisted of youth. Findings from the focus groups with adult professionals (Stephan et al., 2010) highlight 10 critical factors of SMH capacity building, with one of the 10 factors directly emphasizing family and youth engagement, specifically that "young people and families from diverse backgrounds must be engaged in all aspects of SMH policy and program development" (p. 53). In order to address this critical factor, Stephan et al. made specific strategy recommendations based on analysis of the focus group findings, including the following: (a) expanding the roles for families in schools as strong partners in the education of their children; (b) engaging culturally diverse family and youth organizations as collaborative partners in SMH programs and services; (c) inviting youth and families as strong participants in all SMH efforts; (d) offering incentives for youth and families to participate in SMH efforts; (e) ensuring leadership and decision-making roles for youth and families in SMH efforts; (f) ensuring that SMH professionals and educators fully understand the

value and processes of effectively engaging youth, families, and community partners; and (g) increasing youth engagement through their participation in mentorship activities, speakers' bureaus, and youth leadership initiatives.

Within the SMH-CBP partnership, youth engagement was modeled by inviting youth in each of the four states noted above to participate in the focus group study. Specifically, in each of the four states (MD, MO, OH, OR), focus groups with youth were conducted to gain their perspectives on what schools can do to better address the mental health needs of all students. Through their responses, these youth highlighted a number of key themes including confidentiality when helping students, strong trusting relationships between students and adults in school, school staff openness to learn about students' backgrounds and cultures, staff training in mental health issues, a positive school environment, opportunities for participation in curriculum development cocurricular participation, and active youth engagement in development of SMH programs and policies. A detailed summary of lessons learned from youth through the focus groups is available on the NASBHC website (http://ww2.nasbhc.org/RoadMap/Public/MH_What%20Students%20Say.pdf).

In 2004, the NCOP was developed via collaboration between the IDEA Partnership, a national initiative to improve learning supports for youth in special education, and the Center for School Mental Health (CSMH), one of two national centers focused on the advancement of SMH.[1] The NCOP works with 22 national organizations, 9 technical assistance centers, leaders in 16 states, and other interested stakeholders to facilitate a "shared agenda" across education, mental health, and families. The work of NCOP is implemented significantly through 12 "practice groups" each focused on a specific issue or theme (e.g., quality and evidence-based practice, building a collaborative culture for student mental health). In response to the lack of specific guidance on involving youth in SMH programs and services, the NCOP developed a Youth Involvement and Leadership in SMH practice group (see www.sharedwork.org). The aims outlined by the group are to (1) expand youth leadership, participation, and input at all levels, including in local, state, and national efforts; (2) advance the development and implementation of strategies that promote involvement in service delivery systems; (3) support efforts to promote meaningful involvement of youth as an important stakeholder; (4) organize discussion around the inclusion of youth in SMH in meaningful ways; (5) develop and promote best practices for youth involvement and leadership in all aspects of SMH programming; and (6) serve as a resource for educators and practitioners to develop strategies and approaches to teach new skills to promote youth involvement in schools and communities.

The work of NASBHC, including their SMH-CBP initiative in collaboration with the CDC, and the work of the NCOP are encouraging. However, the guidelines have not been empirically evaluated; thus, specific, empirically supported strategies for engaging youth as recipients of care or as guiders of programming decisions are not yet available. For example, SMH professionals lack specific guidance on determining how to help youth and families articulate their perspectives, how to balance youth and family input with that of the professionals, and how to obtain perspectives from educators on student functioning while maintaining confidentiality. In order to establish such guidelines, additional data are needed. Schools may take initial steps toward building partnerships with students by obtaining their perceptions of common problems and needs, services to address those needs, and methods through which students could contribute ideas for enhancing the relevance and effectiveness of school-based mental health services.

To advance our own understanding of the needs of the students we were working with in our state, we conducted a study focused

[1] The IDEA Partnership is funded by the Office of Special Education Programs and housed at the National Association of State Directors in Special Education. The CSMH is funded by the Maternal and Child Health Bureau and housed at the University of Maryland School of Medicine.

specifically on obtaining high school youth perspectives on effective SMH programs and services. In the United States, youth in 9th–12th grade are engaging in behaviors that place them at risk for morbidity and mortality. These behaviors include unintentional injuries and violence, tobacco use, alcohol and other drug use, sexual behaviors contributing to unexpected pregnancy and sexually transmitted diseases, unhealthy diet, and lack of exercise (Centers for Disease Control and Prevention [CDC], 2012). As these behaviors impede students' ability to achieve successful academic standards, many SMH efforts are targeting this population to prevent school dropout and promote school success to graduation. In our own efforts to improve family, school, and community supports for high school students with emotional/behavioral problems, we found it critically important to conduct this study with a sample of high school students to better understand their emotional, behavioral, and social needs, their knowledge about what services and resources they needed, and their access to resources and services provided in their school. We conceptualized this study based on a review of the fairly limited literature on partnering with youth to inform SMH programs. A description of the study and its findings highlighting key themes from students' responses and specific recommendations for increasing youth engagement and leadership in SMH follow.

Involving Youth in SMH: A Qualitative Analysis of High School Age Students' Perceptions of SMH

We conducted a qualitative study examining youths' perspectives and knowledge of SMH, including their perception of the problems that students are confronted with, the resources and types of SMH services delivered at their school, and ways to improve these services. The study focused on high school-age youth given our efforts to improve evidence-based SMH interventions for these youth to prevent school dropout and improve student outcomes. We also sought to understand what problems, facilitators, and barriers to effective SMH were salient for these youth.

Sixty youth, ranging in age from 14 to 19 years, were recruited through a study hall course in one high school in a rural area of South Carolina. The high school was selected for the study because of an interest by school personnel X in developing and implementing SMH services, which the school did not currently provide. A convenience sampling strategy was used, with administrators selecting three study hall classes that included students in all grade levels. Student participants were given a packet of measures and an open-ended survey on student needs, resources, and perceptions of SMH, which are the data used for this analysis. Given the timeline for data analysis, only 25 participants completed the survey, and qualitative analysis was conducted with a subset of the sample ($N=25$), who were participating ($N=60$) in the larger study.

After obtaining study approval from the Institutional Review Board at the University of South Carolina and from the school district, parents and students were informed about the project and parents consented; students assented to participation. In study hall classes, students received a structured and open-ended survey written in English that lasted approximately 10–12 min. Participants were given a $5 gift card as an incentive for participating. The survey included seven open-ended items and one Likert scale item. Six of the items assessed student (1) perceptions of the problems that students face in their school; (2) the types of facilitators that make it easy for students to get help and (3) to use resources; (4) individual(s) who students turn to when they experience problems; (5) the types of barriers that exist that prevent students from receiving help; and (6) the types of resources that are presently available to students in their school. On the seventh question, participants reported their willingness to use resources or programs at their school if they were in need of them and they were available, using a five-point response (1 = *least willing* to 5 = *most willing*). To understand students' attitudes regarding SMH, on the

last open-ended item, participants were asked to define what the words "school mental health" meant to them.

Thematic analysis was conducted, using the in vivo software utility, to examine students' responses to the open-ended survey items. Identification of themes emerged through immersion in the data, including data sorting, coding, and comparison. Analyses were performed by two researchers (a middle-class African American woman and a middle-class Caucasian American woman). Each researcher read the entire set survey responses and identified important themes. Initial codes for responses were created and then each response was grouped into these larger themes (Charmaz, 2006). Then data were coded to examine each sentence, individual word, and phrase (Strauss & Corbin, 1990). This process allowed for the identification of categories, properties, and dimensional aspects of the data. The two researchers separately identified themes and then compared the themes that emerged from each other. After the themes were discussed, a third rater was brought in to resolve discrepancies of themes upon the two researchers. This iterative process occurred until all surveys were analyzed and coded and all major themes were identified.

Themes from High School Age Students' Perceptions of SMH

Description of Daily Psychosocial Difficulties

Participants identified several difficulties that affected their psychological and social functioning, reporting problems both at school and at home. They reported experiencing difficulties in their peer relationships at school. These difficulties included forms of physical and relational violence. Several participants, for example, reported that they were bullied or teased to the extent of getting into fights. Other participants reported that they experienced peer pressure that overwhelmed them.

Some participants reported that academic pressures impaired their psychosocial functioning because they felt that they had to "…make the best grades to get into a good college." Another academic stressor was the amount of pressure students experience from their families regarding grades. As reported by one participant "…families bother you about grades."

Additional difficulties involved relationship problems at home, such as divorcing parents, unfair treatment by stepparents, poor communication, and general challenges manifested as fighting with parents. Additionally, alcohol, drug, and cigarette use were noted as concerns of youth

Getting Help for Problems

Participants were asked to describe what would make it easier for teens to get help with problems at their school and what stops them from getting help. Participants overwhelmingly reported that they would like more connections to resources, including access to trusted relationships with others in the school and structures for promoting the development of trusted relationships. They reported a preference for regular, ongoing opportunities to talk with counselors and others at school, but at the same time reported numerous challenges that make this impossible. Challenges included not knowing of someone who understood, absence of school staff who had experienced similar problems, staff who conveyed disinterest, and staff who were unavailable because of workload or lack of time. Several students reported that if they were experiencing problems, they would deal with the problem alone and not tell anyone. Fear seemed to be a motivation for wanting to avoid disclosure. Whether perceived or real, participants' fears included retaliation by the person who the participant had problems with, consequences or punishment if problems were revealed, mistreatment if undesired people learned of their "business," and not receiving help for their problems either because they were "hopeless" or others would be incapable of helping.

Barriers to Getting Help

When asked to identify barriers that deter students from accessing school resources, they identified past negative emotional experiences, their perceptions of how other people viewed them, consequences they faced, and lack of support from other people. Participants described feeling afraid and threatened from other students about sharing their problems or seeking help from authority figures. The participants construed "telling" as "snitching," which is viewed very unfavorably. For example, one participant reported "snitches deserve stitches and should be found in ditches." This phrase represents the harmful effects youth may face if they seek help from authority figures. By refusing to get help, these youth remain vulnerable, duplicitously shielding and protecting the individuals who are troubling them from consequences. These conflicting experiences contribute to participants' feeling unsafe, unprotected, and incapable of stopping things that are out of their control. Unfortunately, participants' fear of potential reprisal for exposing their problems may, in fact, exacerbate their inability to access resources because no one knows they are suffering.

Additionally, participants' perceived lack of support and helplessness deterred them from accessing resources. They reported feeling that there was no one available to help them, that "nothing would help," or that "no one knows how I feel." Students' feelings of embarrassment and pride regarding admitting and exposing their problems may be exacerbated if adults reach out to students poorly, leading students to never seek help and suffer in silence. According to (Yalom & Leszcz, 2005), universalization and normalization are strong therapeutic concepts that help people cope and manage fear and hardships. Participants experiencing problems within a silo may begin to believe they are the only ones experiencing a particular problem, and they may experience the problem for a prolonged time, unnecessarily. Participants also reported worries about fitting in. For example, one participant reported "if other people knew what I experienced I wouldn't fit-in…and people would say something bad about me." Fear of fitting in and fear of additional negative consequences were common themes deterring participants from accessing school resources.

Ease of Using School Resources

Participants also were asked to identify school resources. Several participants responded that they did not know of any resources or they were unsure about the existence of any resources. There are several plausible interpretations for these responses. It may be that some participants had experienced few problems and had no need to seek resources. They did not need resources; hence they did not have any knowledge about existing resources. Alternately, it may be that participants had experienced problems, but were unsure about using resources because of the previously mentioned fears regarding accessing them. Thus, they were fearful of accessing resources and felt uncertain using them. Further, it may be that participants had experienced problems, but did not know of existing resources. Thus, knowledge of and need for resources may vary depending on several factors, including participants' need for resources, degree of industriousness regarding finding resources, availability of resources, ability to overcome fear of using resources, and ability to access identified resources.

Some participants also explicitly recognized a need for resources, such as extracurricular activities, and the importance of being able to access those resources, to help take their mind off problems. They listed a variety of activities they would appreciate accessing, such as the library, gym, and computer labs at school. However, they reported that there were not many activities available to them in their area. Participants wanted time to participate in programs during school hours, given that in rural communities transportation is problematic for some families. Youth may not have parents who can transport them to after-school activities. If participants cannot participate in activities during school hours, they may be denied altogether, especially if they are totally dependent on school buses to get home (Weist, 1997).

Willingness to Use School Resources

Participants also rated their willingness to use school resources and programs if they had a problem (1=*least willing* to 5=*most willing*). Participants' scores were skewed toward feeling less willing (M=2.12, SD=.88, range 1–4). No participants indicated that they would be *most willing* to use school resources if they had a problem.

Meaning of School Mental Health

Recognizing that the construct *mental health* carries some degree of stigma and that delivery of mental health services in schools is not standardized and universal, participants were asked what the words "school mental health" meant to them. This was in effort to understand the implicit association and connotations associated with the phrase. Participants listed a range of responses including identifying school personnel, the idea of helping, and indicators of the presence or absence of physical and mental health and well-being, as well as components of academics. Participants also indicated ideas that were consistent with perspectives of mental health that reflect deficits-based approaches, abnormalities, and stigma. In general participants listed the following words that came to their minds: school staff (e.g., "nurses, guidance, and teachers"), helping (e.g., "talking, thinking, caring individuals"), and physical health and well-being (e.g., "stress, headaches, crazy, emotions, safe, self-control, self-confidence, healthy mind-set regarding school, brain, and problems"). Other items that were listed were "academics, people think something's wrong with you, institution." Because the survey was anonymous, we could not conduct follow-up interviews to further explore these responses.

Discussion, Limitations, and Recommendations

This chapter reviewed the call for youth involvement as a national priority in service provision and as an important practice in advancing efforts in SMH. Central to involving youth is developing equitable mutually beneficial partnerships, but models for partnering with youth and specific strategies for involving youth in SMH cannot advance if the perspective of youth is omitted. Given previous efforts documented by the NASBHC to incorporate youth voice on issues related to SMH, we conducted a survey as an initial step to understand the perspectives of the population of youth that we are seeking to help in improving SMH programs and practices in South Carolina. This demonstrates one way in which researchers, practitioners, and school professionals may approach involving youth to inform and advance SMH efforts.

The findings of the study highlight the importance of soliciting the voice of youth for the promotion of improved SMH service delivery. As indicated by the survey results, there were youth who expressed that even if they had problems and if services existed, they would still be unwilling to use them. Further understanding the specific barriers that impede SMH use for students is a critical step toward removing them. This reflects the theme in this chapter on the need for purposeful outreach by education and SMH staff to students on emotional, behavioral, and academic challenges they are facing and requesting their recommendations on the best approaches to help them with these challenges. Student responses then can help guide programming at universal, selective, and indicated levels of prevention, consistent with the increasing emphasis on multi-tiered systems of promotion and support as in school-wide positive behavior support (and reflected in a number of chapters in this book).

Other themes that emerged from our qualitative analyses indicated that youth were fearful of experiencing negative consequences from seeking services or help, that they felt disconnected from school and possible programs or services offered at school, and that there was a lack of resources and availability of services that they knew about within their schools. By identifying these concerns and continuing to ask youth about their perspectives on these issues, we may begin to develop specific strategies and practices that promote greater youth involvement

and partnerships in SMH and potentially more effective programs and services.

Clearly, the findings of this study are not generalizable to all high school youth. In addition, the survey methodology has limitations, in that it was not possible to conduct follow-up interviews to gain deeper understandings of the youth responses to survey questions. Nonetheless, the results do shed light on important dimensions to consider in engaging youth in SMH more broadly. For example, efforts might focus on strategies that reduce youth's fear of consequences of others knowing of their own emotional and behavioral difficulties. SMH professionals might also develop strategies for improving relationships and connections between students and other peers and adults in schools. Attending to these issues and continuing to ask youth about their needs, awareness of resources, perceptions of stigma, and suggestions for improving SMH programming may prove useful in developing additional strategies to inform the development of SMH programs, practices, and policies.

Education and SMH professionals should focus on building relationships with youth, assessing their skills, and building on their strengths and assets while marketing SMH services. As emphasized by the study participants, youth are not willing to share their problems with professionals if trust, privacy, and confidentiality are compromised. Professionals must refrain from giving the appearance that they are untrustworthy or gossipers. Youth are fearful that if they disclose about their problems, others will find out and begin mistreating them. This fear is a barrier to SMH services and one that staff should continuously be mindful of.

Another strategy SMH professionals should use to build relationships with youth is to communicate "unconditional, positive regard" (Rogers, 1995, p. ix). This type of communication conveys empathy, acceptance, and opportunities for growth and personal development. As suggested in the survey results, youth did not believe that adults could help them or that they were interested in hearing what they had to say. Youth can be distrusting of adults, especially if they perceive that adults have failed them previously. SMH professionals can offer youth opportunities to establish positive, healthy relationships with trusting and caring adults. Given the survey responses, youth want this type of relationship, but are unsure of how to find or create it.

Youth involvement is essential to the success and effectiveness of SMH programs, but often youth voice is not sought or seriously considered in shaping these programs. Rather than a supplemental activity that programs may or may not engage in, we hope the clear message from this chapter is that youth voice is absolutely essential to effective programs.

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Strengthening Components and Processes of Family Involvement in School Mental Health

Heather L. McDaniel, Bryn E. Schiele, Leslie K. Taylor, Jill Haak, and Mark D. Weist

Involving families in youth mental health services is foundational to achieving positive youth outcomes (for review, see Hoagwood et al., 2010). Unfortunately, this can be a particularly challenging process, and families are often not meaningfully involved in services. In studies of engagement in community mental health services, youth and family no-show rates at initial appointments range from 28 % to 62 % (Harrison, McKay, & Bannon, 2004; McKay, Lynn, & Bannon, 2005; McKay, McCadam, & Gonzales, 1996). Thus, at a basic level of involvement, some families are not being engaged in services. This has the potential to compromise the delivery of evidence-based interventions given that family involvement may be an essential factor in obtaining and maintaining positive outcomes for youth (National Institute of Mental Health [NIMH], 2001). As national mental health policy calls for families to become active consumers of mental health services, and for children and youth to receive more comprehensive services (New Freedom Commission on Mental Health [NFCMH], 2003), it is increasingly important to review empirically supported strategies for effectively involving families in mental health services so that these approaches can be consistently integrated into practice.

Despite the call for and importance of incorporating families in youth mental health services, community-based locations, such as schools, bring unique challenges to engaging families in youth mental health services (Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007). These include the inability of the family to get to the school during school hours, variability in behavior and attitudes of school staff toward families, and negative experiences family members may have had with their own schooling (Bickham, Pizarro, Warner, Rosenthal, & Weist, 1998). Thus, it is important to examine effective family involvement strategies specifically within the context of SMH.

Family Involvement in School Mental Health

The President's New Freedom Commission on Mental Health (2003) calls for involving "consumers and families fully in orienting the mental health system towards recovery." In addition, the President's New Freedom Commission (2003), the Surgeon General's Report on Mental Health

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(U.S. Department of Health and Human Services, 1999), and the No Child Left Behind Act (2002) call for the expansion of mental health services for youth in schools. Expanded SMH involves the provision of a full continuum of effective mental health promotion; prevention of social, emotional, and behavioral problems; and intervention for students in general and special education through a shared agenda involving school-family-community partnerships (Weist, 1997). As indicated in this emphasis on a shared agenda (see Andis et al., 2002), families play a key role in collaborating with SMH staff in improving their child's emotional, behavioral, and school functioning. Additionally, families should help to guide and continuously inform mental health programming. Although such family involvement is central to high-quality SMH, often such involvement is not at an optimal level (see Weist et al., 2007; Lever et al., 2006). In this chapter, we will review evidence-based strategies which enable the successful engagement of families with schools and in SMH programs and services. Issues related to family involvement are further illustrated through experiences from a research study that focuses on achievable strategies for high-quality, evidence-based practice in SMH, with a major emphasis of this study placed on family engagement and empowerment[1].

School-Wide Family Involvement

Family, school, and community factors are believed to operate in concert to influence children's learning (Epstein, 1987). When families are actively involved in the school, there are many benefits for students, including earning higher grades and test scores, increased likelihood of grade-level promotion, having more positive attitudes about school, and graduating and pursuing higher education (Catsambis, 1998; Epstein, Clark, Salinas, & Sanders, 1997; Miedel & Reynolds, 1999; Shaver & Walls, 1998; Shumow & Miller, 2001; Trusty, 1999; Westat and Policy Studies Associates, 2001; for review see Henderson & Mapp, 2002). Various factors influence levels of caregiver involvement in their children's education. Family involvement is influenced by the child's age, with involvement decreasing as age increases (Epstein & Connors, 1994). Other demographic characteristics include socioeconomic status, ethnicity, and cultural background (for review see Hill & Taylor, 2004). In general, families of higher socioeconomic status are more involved, given less time constraints from work, as well as fewer barriers to transportation and resources (Hill & Taylor, 2004). Factors that support caregiver involvement and are more malleable include caregiver perception of their role in their youth's education, whether the caregiver feels efficacious in helping their student learn, and invitations from the school to be involved (Hoover-Dempsey & Sandler, 1995, 1997; Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). LaParo, Kraft-Sayre, and Pianta (2003) found that a significant majority of families were willing to participate in school-initiated kindergarten transition activities, when offered the opportunity. Additionally, those who participated in these activities were more likely to be involved across subsequent school years. This underscores the crucial role of teachers in reaching out to caregivers, inviting them to play an active role in the school from an early stage.

At the administrative level, the principal sets the tone for family involvement in the school (Hiatt-Michael, 2006). For example, as the on-site administrator, a principal can promote family involvement activities by building time for these activities into staff schedules and role descriptions. For teachers and staff, the most significant barriers are related to lack of adequate preparation and training (Morris & Taylor, 1998). When provided with foundational courses in family involvement in education, teachers reported greater comfort and competence in planning and implementing programs emphasizing this theme (Morris & Taylor, 1998). In addition to teachers and school administrators,

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school-employed mental health staff, such as school psychologists, counselors, and social workers, also play a critical role in promoting family involvement in the school (Bryan & Holcomb-McCoy, 2004).

Targeted Family Involvement in School Mental Health Programs and Services

In contrast to the aforementioned school approach which targets parents, guardians, and family members of all students, this section focuses on enhancing family involvement among students receiving SMH services. Currently, the need for family involvement in youth mental health services is fairly well accepted. This may be due to various factors such high levels of caregiver stress that are consistently reported when raising a child with mental health needs and accessing suitable services (Weisz, 2004). However, while familial involvement is critical to effective child and adolescent therapy (Weisz, 2004), attention to caregiver support in children's mental health services has been minimal (Hoagwood et al., 2010). A lack of research and attention to development of programs of this sort has resulted in few program models that can be examined and replicated. Thus, in this section, commonly used models of family support will be discussed, followed by key processes of family involvement and related interventions.

Models of Targeted Family Involvement

Families can be involved in services in a variety of manners, and here we will specifically discuss family supports. Family supports can be defined as "services, interventions, or programs targeted at the needs of parents or caregivers of children or adolescents with identified mental health needs" (Hoagwood et al., 2010). There are three primary delivery models of family supports: clinician led, family led, and team led. Clinician-led supports are led by a mental health clinician, with most at the masters or doctoral level, while family-led supports are led by a caregiver of a youth with a mental health problem who has already navigated the complexities of the mental health service system. Team-led family supports are led by a team that consists of a clinician and an experienced family member. In a meta-analysis of clinician-led, family-led, and team-led supports for families, Hoagwood and colleagues (2010) identified 50 programs that were targeted to the needs of families of youth presenting emotional/behavioral challenges. Specifically, services, interventions, or programs were included if they provided informational/educational support, instructional/skill development support, emotional or affirmational support, instrumental support, or advocacy support to families.

Clinician Led

In the Hoagwood et al. (2010) review, supportive services led by the clinician were the most common (33 of the 50 programs). Most of the supports provided by clinicians focused on providing instructional (n = 26, 79 %) and informational (n = 22, 67 %) support; however, 30 % also identified emotional support as a key component. Instructional support was commonly provided through building parenting skills or addressing caregiver mental health problems. Informational support was most frequently presented as clinicians providing psychoeducation to the families. And, emotional support included one-on-one discussions between clinicians and family members. Almost all of these clinician-led supportive services were based in a clinical (i.e., non-community) setting, and eligibility to participate was based on the child's diagnosis or treatment status. Results from clinician-led supportive services included reductions in symptoms and improvement in functioning for youth, high caregiver satisfaction, improvement in parenting skills, improved treatment attendance, and reduced premature case closure (see Hoagwood et al.).

Family Led

Family-led supportive programs were the next most common type of programs (11 of the 50 programs). Peer-to-peer family services have

evolved to develop new family supports and help with management of the stressors associated with raising a child with mental health needs. In peer-led delivery systems, services are provided by parents or caregivers with experience navigating systems for their children with identified emotional/behavioral problems to parents or caregivers without such experience (Hoagwood et al., 2008). Evidence suggests these programs are beneficial both to peer leaders and the group members (Koroloff, Elliott, Koren, & Friesen, 1996). Due to personal experience with managing barriers to services and dealing with caregiver stress, these experienced family members have been reported as more credible and trustworthy by caregivers, making them able to encourage the active engagement of families in mental health services (Gyamfi et al., 2010; Hoagwood, 2005; Osher, Penn, & Spencer, 2008).

The popularity of caregiver-led supportive programs has stimulated advocacy organizations, such as the National Alliance on Mental Illness (NAMI), Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD), and the National Federation of Families for Children's Mental Health, to develop training programs for peer leaders. Typical types of support provided in these family-led supportive services are advocacy, instructional supports, informational supports, and emotional supports (Hoagwood et al., 2010). However, research on the content of these services and their impact on families is quite limited (Hoagwood, 2005). As peer-delivered family support has recently become a billable mental health service in a number of states (e.g., New York, Maryland, South Carolina; Cavaleri, Olin, Kim, Hoagwood, & Burns, 2011), it is hoped that increased emphasis will be placed on the development of evidence-based, supportive programs that can be implemented in a variety of healthcare settings.

Team Led

The team-led supportive programs, programs led by a clinician and an experienced family advocate, were the least frequent (6 of the 50 programs) in the Hoagwood et al. (2010) review. These programs involve more of a collaborative process among families and professionals, with each team being characterized by "different responsibilities, equal voice, and a common purpose" (Ireys, Devet, & Sakwa, 2002; p. 158). As opposed to clinician- and peer-led supportive services, team-led programs are generally conducted in a group-based format (Hoagwood et al., 2008) and are not necessarily dependent on the child's receipt of services. Across these types of programs, such as the Vanderbilt Empowerment Project (Bickman, 1987) and Parent Connections (Ireys et al., 2002), it has been found that much emphasis is placed on provision of emotional support. Families are encouraged to share experiences and insights and are met with affirmational listening (i.e., communication intended to promote a caregiver's feelings of being supported, valued, and affirmed), intended to enhance well-being and self-efficacy (Hoagwood et al., 2008). Additionally, these programs place emphasis on instructional support through building parenting skills, informational support through providing information on the nature of emotional and behavioral problems in children and youth and navigating the healthcare system, and strategies for families to become advocates for themselves. Studies of the effectiveness of such team-led programs have reported enhanced caregiver empowerment, increased access to services, and improved youth functioning (Bickman, 1987; McKay, Quintana, Kim, Gonzales, & Adil, 1999; Ruffolo, Kuhn, & Evans, 2005).

Key Processes in Targeted Family Involvement

As described above, family support services, which are intended to bolster family involvement and support families in youth mental health services, can be provided in various modes. In the following section, key processes involved in support services will be examined. It is important to recognize that many of these constructs may be overlapping and are complimentary. These key processes are important in understanding how and why interventions work and are also important for the development of new strategies to enhance family involvement in schools and in SMH programs.

Engagement

Low family engagement and family retention in treatment are problematic in youth mental health services and are significant threats to evidence-based interventions (NIMH, 2001). McKay and Bannon (2004) conceptualize engagement in services as beginning with the recognition of a child's mental health issue, connecting to relevant services through referral, and then completing with the child receiving services. In the literature, engagement has also been broken down into two steps: initial attendance at services and ongoing retention in services (McKay, Stoewe, McCadam, & Gonzales, 1998). However, in certain high-risk populations, youth and family no-show rates at initial intake for community mental health appointments are alarmingly high (Harrison et al., 2004; McKay et al., 2005; McKay et al., 1996). This underscores the critical need for strategies to bolster families' initial and ongoing engagement in SMH.

While treatment attendance is important, it cannot be the only variable considered when discussing engagement (Staudt, 2007). There are both behavioral and attitudinal components of engagement (Staudt, 2007). For example, a fully engaged client may desire therapy, understand its importance, be committed to it, and actively participate (e.g., complete homework, respond to the requests of the therapist; see Karver, Handelsman, Fields, & Bickman, 2005). In a similar manner, caregiver engagement in therapeutic services could also be expanded to include these same constructs outlined above (Karver et al., 2005). However, the literature has focused more on behavioral than attitudinal or emotional aspects of family engagement in services, pointing to an important area of future research (Staudt, 2007).

Factors Related to Family Engagement

Relatedly, there are numerous process variables that have been identified that affect family and youth engagement in youth mental health services (for reviews, see Gopalan et al., 2010; McKay & Bannon, 2004). Here, specific factors at the student, family, and clinician levels that are pertinent to family engagement in SMH services will be reviewed. At the student level, adolescents may be particularly resistant to involving family members, as adolescence is a period marked by a desire for independence and self-determination. Additionally, students may be resistant to involving family members if they fear familial disapproval for seeking SMH services or if they wish to conceal the presenting problems for which they are seeking services (Bickham et al., 1998; Center for School Mental Health Assistance [CSMH], 2002).

Families have identified concrete barriers to involvement in SMH services, across socioeconomic status, ethnicity, and religion, including lack of transportation or childcare and inflexible scheduling (Bickham et al., 1998; CSMH, 2002; Koroloff, Hunter, & Gordon, 1994). Ideological barriers include concerns about confidentiality, stigma related to mental health services and problems, and concern that the clinician may talk down to or blame family members for the student's problems (Bickham et al., 1998; CSMH, 2002; Federation of Families for Children's Mental Health [FFCMH], 1998; Koroloff et al., 1994).

And finally, at the clinician level, there may be concern that involving the family could slow down or unnecessarily complicate the treatment process (Bickham et al., 1998; CSMH, 2002). For instance, the clinician may worry that balancing the involvement of additional family members could jeopardize the clinician's alliance with the student. Alternatively, the clinician may not have training or experiences in providing services to families (CSMH, 2002).

Strategies for Engaging Families

Strategies have been developed to enhance family engagement in SMH. A critical first step for the SMH program is to establish the importance of family involvement, as well as to create a philosophy about how families will be involved in the program (Bickham et al., 1998; CSMH, 2002). Central to the importance of family involvement is the recognition that the family is the primary and most influential system in which the child belongs. Additionally, by involving the family, more information can be acquired about the child, and the family can assist with promoting change in the home environment (CSMH,

2002). Caregivers can be involved in various capacities, such as a recipient of services, parent advocate, or otherwise. The roles in which families can be involved should be determined before presenting an invitation to participate in the SMH program (Bickham et al., 1998). Once this has been ascertained, more tangible strategies can be employed to include families in the SMH program.

An important engagement strategy for clinicians and other professionals is to utilize a collaborative style with families. Unfortunately, there has been an emphasis on the "professional-centered" model in mental health, in which the clinician serves as the expert, and this approach can lead to professionals treating families in a patronizing manner (Bickham et al., 1998). While the clinician brings a breadth of clinical expertise to the table, families bring substantial expertise as well (FFCMH, 1998). Families have the most information about their child(ren) and their family and can provide details about the strengths and difficulties associated with both. Additionally, caregivers have more time to work with the child and to monitor progress than does the clinician, making caregivers important partners in the change process. Therefore, clinicians should actively request family input and guidance, demonstrating respect for their ideas and refraining from assuming a stance as "expert."

In an important study by McKay and colleagues (1996) of family engagement, social workers at a mental health center were trained in engagement strategies specifically for the initial interview with families. Focal elements of this training were to clarify processes associated with mental health services as well as to provide service options, to begin the collaborative relationship between the client and the worker, to focus on concrete and practical concerns of families, and to assess potential barriers to services. Results indicate that clients that participated in the engagement strategies were significantly more likely to attend the first appointment.

Empowerment

It is believed that engagement is an antecedent to empowerment (Itzhaky & York, 2000). Family empowerment has been characterized as "helping families become active and competent agents of change" (Hoagwood, 2005, p. 701). Empowerment and the related construct, self-efficacy (i.e., beliefs about personal efficacy in a given situation), are based on Bandura's social learning theory (1977). It is believed that empowerment and self-efficacy are fostered when caregiver strain is reduced and skills and knowledge are increased (Hoagwood, 2005). Skills for empowerment of caregivers in relation to their student's mental health problems could include assertiveness, communication, goal setting, problem solving, and how to navigate resources (Bickman, 1987; Hoagwood, 2005). Relatedly, knowledge around the youth mental health service system and community resources could be targeted in addition to understanding about assessment and treatment procedures and caregiver rights (Bickman, 1987; Hoagwood, 2005). Family empowerment over time has been found to be predictive of positive change in youth with externalizing problems, as well as youth functioning and satisfaction with services (Resendez, Quist, & Matshazi, 2000; Taub, Tighe, & Burchard, 2001).

Strategies for Empowering Families

Bickman (1987) conducted a study on empowering caregivers of youth receiving mental health services. The study was based upon a logic model that suggested that the empowerment intervention would increase knowledge of the mental health services system and mental health services self-efficacy. Increases in knowledge and self-efficacy were then hypothesized to lead to increased family involvement in youth mental health services, leading to increased service utilization and finally to better clinical outcomes for the youth (Bickman, 1987). The Caregiver Empowerment Project was an 11-h training for caregivers held over 3 days. The training focused on building caregiver knowledge about the mental health system, available resources, and assessment and treatment procedures in mental health services, along with discussion of caregiver rights in receiving these services. Caregivers were also taught tangible skills such as assertiveness, communication, goal setting, assessing professional relationships, problem solving, finding relevant community resources, and creating files

for personal records. Finally, caregivers were encouraged to actively participate in decision making and to build collaborative working relationships with mental health professionals, with appropriate participation in caregiver support groups modeled for them. The Caregiver Empowerment Project significantly predicted caregiver knowledge about mental health services and self-efficacy about acquiring and participating in mental health services for their children. However, other hypotheses on increased knowledge and self-efficacy leading to increased involvement in services and improved outcomes were not supported.

Based on the work of Bickman (1987), a recently developed and piloted program, the Parent Empowerment Program (PEP), was developed through a community-based participatory research approach and targeted at family advocates (Olin et al., 2010b). PEP is a 40-h, manualized training based upon the book *Improving Children's Mental Health through Parent Empowerment: A Guide to Assisting Parents* (Jensen & Hoagwood, 2008) and is aimed at family advocates new to the field (Olin et al., 2010a). There was significant change in advocates' perceptions of their overall professional skills. Specifically, the advocates presented more advanced skills such as priority setting, problem solving, group management, and application of knowledge in the areas of child mental health problems and treatment, the mental health services system, and services in the school system (Olin et al.). Although more research is warranted, this program shows promise in enhancing family advocates' competencies, as family advocates become more prominent in children's mental health services (Hoagwood et al., 2008).

Alliance

The therapeutic alliance, also referred to as the therapeutic relationship, alliance, helping alliance, working alliance, and others, is a significant construct that has been discussed since the infancy of psychotherapy and is very related to the constructs discussed above. Alliance has been commonly conceptualized as a relational connection with the clinician (Karver et al., 2005). Bordin (1979) further conceptualizes the construct as the assignment of tasks and agreement on goals in therapy, as well as the development of a bond. Alliance has been shown to be a predictor of outcomes (Shirk & Karver, 2003); however, different alliances (i.e., youth-clinician alliance, caregiver-clinician alliance) are predictive of different outcomes. Youth alliance is significantly associated with greater improvement in youth- and caregiver-reported symptom severity, as well as predictive of engagement in therapeutic tasks (Hawley & Weisz, 2005; Karver, Handelsman, Fields, & Bickman, 2006). Caregiver-clinician alliance is positively related to family participation in treatment and agreement with their clinician on when to end services and negatively related to session cancellation rates (Hawley & Weisz, 2005). Additionally, caregivers of youth who did not complete treatment indicate higher levels of therapeutic relationship problems than caregivers of youth who completed treatment (Garcia & Weisz, 2002). Given these findings, it will be important to use alliance-building skills to engage and retain families in SMH services as well as reach positive outcomes for students.

Alliance-Building Strategies

Although more research is needed, some alliance-building and alliance-diminishing behaviors have been identified. Creed and Kendall (2005) examined clinician behaviors that contribute to youth's perceptions of the therapeutic alliance within the context of cognitive-behavioral treatment for anxiety disorders. Collaboration between the clinician and youth was predictive of higher youth ratings of alliance. Collaboration was defined as the therapist characterizing therapy as a team effort, including mutual goal setting and the therapist encouraging the child to be involved and give feedback about treatment. Alternatively, finding common ground, or emphasizing commonalities with the child, and pushing the child to talk, pressuring the child to talk about their anxiety beyond the point that the youth was interested or comfortable, were predictive of lower youth ratings of alliance. While utilization of these skills in session could be advantageous in forming stronger alliances with the youth client, more research is needed in the area of building and maintaining alliances with families.

Application of Family Involvement Strategies in SMH Services

A large project underway entitled "Strengthening the Quality of School Mental Health Services" and funded by the National Institute of Mental Health focuses on implementation of a school mental health quality assessment and improvement intervention that emphasizes family engagement and empowerment and evidence-based practices. Participants in the study are school mental health clinicians employed by a community mental health center and based in approximately 30 elementary, middle, and high schools. Students and families served by clinicians are also participants in the study. The study is a randomized controlled trial with staff assigned to the target condition referred to as Clinical Services Support (CSS), or a comparison condition emphasizing Personal and Staff Wellness (PSW). In the CSS condition, clinicians are receiving significant and ongoing training and coaching in systematic quality assessment and improvement (Weist et al., 2007), modular evidence-based practice for disruptive behavior problems (Chorpita & Daleiden, 2007), and family engagement and empowerment (FEE) strategies (Hoagwood, 2005; Jensen & Hoagwood, 2008; McKay et al., 2004; Olin, Saka, Crowe, Forman, & Hoagwood, 2009; Rones & Hoagwood, 2000), which are all reinforced through implementation support (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

The strategies employed for FEE are based on the work of Hoagwood and colleagues (Hoagwood, 2005; Jensen & Hoagwood, 2008; Olin et al., 2009; Rones & Hoagwood, 2000), building from the work by McKay and Bannon (2004), which aims to improve engagement and retention of families in community mental health services. More specifically, clinician participants are trained and supported on how to assess and prioritize family needs; how to engage, listen to, and set appropriate boundaries with families; how to assist families in accessing appropriate services; and helping caregivers become their child's case manager to ensure the receipt of appropriate and effective services.

Fidelity of FEE strategies is being assessed with the *Family Engagement/Empowerment Observation System* (*FEEOS*; Weist, 2009), which is an eight-item, observational measure that has been created to assess factors (1 = poor to 6 = superior) pertinent to family engagement and empowerment such as general (e.g., empathy, sincerity, warmth, humor), agreement, trust, engagement, collaboration, support, and empowerment strategies as employed by mental health clinicians. In on-site implementation support, senior trainers are using the FEEOS to assess and give collegial feedback to clinicians on their family engagement and empowerment strategies.

Preliminary findings drawn from FEE data have interesting implications. These data indicate growth in the number of family sessions by CSS clinicians over time and can be used to identify "model clinicians" (i.e., clinicians who have the most success in engaging and empowering families), with model clinicians as potential mentors for those struggling with FEE skill development. Notably, the infrastructure supports of having senior trainers providing intensive bimonthly training on FEE and at least monthly on-site coaching support have led to significant increases in family involvement by clinicians in the CSS condition (specific results cannot be reported since at the time of this writing, there is an additional year of data collection).

However, even with these supports, clinicians have discussed the tension of implementing FEE and evidence-based strategies while negotiating significant bureaucracy associated with fee-for-service billing (see Staudt, 2007). For example, clinicians required to see a minimum of seven clients a day may try to maximize their time catching up on phone calls or paperwork when a client misses an appointment, rather than contacting the family and keeping them engaged. Thus, it is believed that this project will not only add significantly to this critical research area and to knowledge of best practices but will also provide noteworthy lessons to impact policy.

Conclusions and Future Directions

When families are actively involved in the school, there are many benefits for students (Catsambis, 1998; Epstein et al., 1997; Miedel & Reynolds, 1999; Shaver & Walls, 1998; Shumow & Miller, 2001; Trusty, 1999; Westat and Policy Studies Associates, 2001; for review see Henderson & Mapp, 2002). Factors that support this caregiver involvement in schools include caregiver perception of their role in their youth's education, whether the caregiver feels efficacious in helping their student learn, and invitations from the school to be involved (Hoover-Dempsey, & Sandler, 1995, 1997; LaParo, Kraft-Sayre, & Pianta, 2003; Walker et al., 2005). Similarly, family involvement is critical to effective child and adolescent therapy (Weisz, 2004). While supportive services led by clinicians seem to be the most common method of supportive services delivery, the popularity of caregiver-led supportive programs has stimulated the development of training programs for peer leaders as family advisors. Family advisors have been reported as more credible and trustworthy by caregivers, making them able to encourage the active engagement of families in mental health services (Gyamfi et al., 2010; Hoagwood, 2005; Hoagwood et al., 2010; Osher et al., 2008).

Research has supported a number of key processes that contribute to family involvement in their child's mental health treatment including engagement, empowerment, and alliance. Supporting school-based mental health clinicians with strategies to promote these processes has the potential to bolster family involvement in SMH services. And, current research aimed at improving the quality of SMH services is targeting strategies to build family engagement, empowerment, and alliance in SMH services.

While much great work has been done in the area of family involvement, there are several ways to conceptualize engagement and empowerment and multiple interpretations of their operationalization. This, taken together with their overlap with related constructs such as alliance (Dearing, Barrick, Dermen, & Walitzer, 2005; Yatchmenoff, 2005), makes it difficult to define and develop standardized measures of engagement and empowerment. Variability in the conceptualization and operationalization of family engagement and empowerment impacts empirical investigation of these constructs, as well as the investigation of their relationship to treatment processes and outcomes. This has led some intervention researchers to implicate poor FEE construct clarity as a unique contributor to the development of gaps within the knowledge base (Dearing et al., 2005; Staudt, 2007). Multiple interpretations of their operationalization taken together with overlap with related constructs such as alliance (Dearing et al., 2005; Yatchmenoff, 2005) makes it difficult to define and develop standardized measures of engagement and empowerment. This lack of clarity is a notable limitation given that consistent assessment and feedback of clinician FEE skills, and of family perceptions and responsiveness to these skills, can facilitate intervention success.

Poor construct clarity is compounded by the empirical trend toward examining concrete (i.e., transportation or childcare as barriers to engagement) and behavioral (i.e., attendance, homework completion) factors influencing FEE, with less attention focused upon differentiating behavioral and attitudinal factors (see Staudt, 2007). Attitudinal components have been conceptualized as the factors driving engagement behaviors and largely contributing to family outcomes (see Staudt, 2007). For example, caregiver characteristics, including attitudes about programming and psychological distress, in conjunction with concrete barriers can play an important role in successfully engaging families in intervention programming influence behavioral factors such as attendance (Mendez, Carpenter, LaForett, & Cohen, 2009). However, the exploration of attitudinal components whether in isolation or in conjunction with concrete barriers relative to FEE skill usage remains a noted deficiency in the knowledge base and contributes to incomplete conceptualization and operationalization of FEE as a construct (e.g., Staudt, 2007).

Potential implications and future directions of these findings suggest the benefit of further investigation of FEE through idiographic, in contrast to nomothetic, approaches. For example, an

idiographic approach, such as a single-case design, could be used to assess and isolate sources of intersubject variability in attitudinal components of caregiver engagement and isolate factors responsible for this variability (see Barlow & Nock, 2009). Given that idiographic methodologies, such as the single-case experimental design (see Barlow et al., 2008), can be implemented in practical settings with flexibility and efficiency; require minimal time, resources, and participants, respectively; and can provide strong evidence of causal relations between variables (Barlow & Nock, 2009), the execution of these types of experimental designs may be the next logical step in determining attitudinal components that influence caregiver engagement in intervention, thus further inform conceptualization and operationalization of the FEE construct. Similarly, use of single-case designs could further elucidate and identify FEE skills that clinicians can use to enhance practices with families.

There is a legitimate argument that low FEE skill usage among clinicians will be associated with poorer outcomes and thus should be viewed as a performance/accountability issue. Strategies to enhance not only the delivery but the accountability in delivery of FEE strategies and evidence-based practice in SMH are an important and under-explored research area, beginning to be pursued by the research team at the University of South Carolina. As the implementation of evidence-based practices (EBPs) becomes increasingly connected to policies mandating dissemination of state and federal grant monies (see the New Freedom Commission, 2003), and the importance of family-driven services is further emphasized in the success of EBPs, the operationalization of FEE skills and their translation into policies at the agency level could have lasting impacts.

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Advancing Effective Family-School-Community Partnerships

Nicole Evangelista Brandt, Cynthia Glimpse, Claudette Fette, Nancy A. Lever, Nicole L. Cammack, and Jennifer Cox

There is a growing emphasis on advancing family-school-community (FSC) partnerships to enhance the academic progress and well-being of all students (e.g., Shapiro, DuPaul, Barnabas, Benson, & Slay, 2010). There has been a recent shift in terminology from discussing "family involvement" or "family participation" in schools to promoting "FSC partnerships" (Epstein & Sheldon, 2006; Price-Mitchell, 2009). Partnerships imply that families, schools, and communities have equal roles and a shared responsibility in students' education and development. In a concept paper by the National Association of State Mental Health Program Directors (NASMHPD) and the National Association of State Directors of Special Education (NASDSE), it was strongly recommended that families, schools, communities, and child-serving agencies partner and collaborate to promote a shared agenda for children's social and emotional development and academic progress at the local, state, and national levels (2001).

The collaborative partnership perspective fits with Bronfenbrenner's (1979) ecological systems theory that views children's development as influenced by five interactive systems, including the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Children's development is influenced by the relationship between these dynamic systems and various settings, including home, school, community, and peers. Similarly, Epstein's (2011) more recent theory, *Overlapping Spheres of Influence of Family, School, and Community on Children's Learning*, is an integrated theory of family and school relations that recognizes the tremendous influence of FSC partnerships on children's learning and success.

It is unrealistic and ineffective for schools to focus exclusively on academically educating students and for families to exclusively focus on fostering social and emotional learning. The division of responsibility results in a dichotomy that can be confusing to a child (Crozier, 1999) and will be less impactful. For example, some studies have found that students are at greatest risk for poor academic performance when there are discrepant expectations at school and home (e.g., Phelan,

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Davidson, & Yu, 1998; Pianta & Walsh, 1996). In more recent years, FSC partnerships have been formed as collaborative relationships in which diverse stakeholders are encouraged to work together and are responsible for designing and implementing prevention and intervention activities in schools and communities to enhance student success in academics, relationships, and careers (Bryan, 2010). As described by, Joyce Epstein, a leading expert in this area, partnerships are "educators, families, and community members work[ing] together to share information, guide students, solve problems, and celebrate successes. Partnerships recognize the shared responsibilities of home, school, and community for children's learning and development" (p. 4, Epstein, 2001). These aforementioned collaborative approaches to FSC partnerships help to create common expectations across settings.

Given the importance of FSC partnerships in improving the academic progress and social, emotional, and behavioral functioning of students, this chapter will provide the following discussion on advancing effective FSC partnerships. To understand the benefits and impact of FSC partnerships, a summary of the empirical evidence for the positive outcomes of FSC partnerships on children's academic progress and social, emotional, and behavioral functioning will be provided. Qualities of effective FSC partnerships will be presented by integrating the goals of the National Federation of Families for Children's Mental Health with the principles of system-of-care and with the best practices for school mental health. FSC partnerships have been recognized as a priority at the national level; consequently, a practice group on FSC partnerships was formed as part of the National Community of Practice on Collaborative School Behavioral Health. The mission of this national practice group, dedicated to families partnering with schools and communities, will be presented, as well as the group's activities, successes, and challenges. To provide practical case examples of FSC partnerships, two programs that have built and sustained successful FSC partnerships are illustrated. Finally, the chapter concludes with recommendations for developing and maintaining successful partnerships, as well as ideas for future directions.

The Role of Policy and Family-School-Community Partnerships

Advancing evidence-based practices and quality care are important priorities in children's mental health (Kazak et al., 2010), including school mental health (Weist et al., 2009). A critical component of evidence-based practices for children is family partnerships (DuPaul, 2007), with some considering family partnerships as the foundation for effective children's mental health interventions (Hoagwood, 2005; Jensen & Hoagwood, 2008). Family partnerships are also recognized as an essential factor in children's education (Hill & Tyson, 2009; Hoagwood, 2005) and as a critical component by federal policies such as the (No Child Left Behind Act, 2002). In an effort to improve academic achievement, the NCLB Act mandated that schools must increase parental involvement. In addition, the importance of parental involvement is included in some federal policies (e.g., Title I, Part A of the Elementary and Secondary Education Act) for schools with high numbers or percentages of students from families of low income to help ensure that all children meet challenging state academic standards (U.S. Department of Education, 2009). More specifically, some schools receive Title I funding to provide a fair and equal opportunity to improve academic achievement among children from disadvantaged environments. Schools with Title I funding are required to work collaboratively with families and community members as well as create an FSC partnership policy (U.S. Department of Education, 2011).

Barriers to Family-School-Community Partnerships

Shapiro and colleagues (2010) suggest that "the complexity and interconnectedness among family, school, and community systems impacting children's mental health make it essential to form partnerships to address the social, emotional, behavioral, and academic needs of all children" (p. 46). Further, FSC partnerships are linked to

many positive outcomes for children and youth (e.g., Hill & Tyson, 2009; Jeynes, 2005). However, there are several barriers to developing and maintaining these partnerships:

- There may be misunderstandings and a lack of trust between families and schools (Anderson & Minke, 2007).
- School staff may talk about involving parents but have negative perspectives on the importance of parental involvement (Eberly, Joshi, & Konzal, 2007).
- African American students and families, particularly low socioeconomic status families, often perceive schools as hostile environments (Bryan, 2005).
- Families and teachers may have incongruent expectations (Brewster & Railsback, 2003).
- Educators may lack training or knowledge on how to effectively and genuinely partner with families (Christenson, 2004; Epstein, 2011).
- School staff may discourage family partnerships when a staff member interacts with caregivers using an expert stance instead of approaching caregivers as an equal partner (Smit, Driessen, Sleegers, & Teelken, 2008).

National accreditation organizations (e.g., National Council for Accreditation of Teacher Education [NCATE], 2002; Interstate New Teacher Assessment and Support Consortium [INTASC], 1992) for teachers include competencies on FSC partnerships for credentialing; however, most of these requirements are aspirational and are not necessarily taught in teacher preparatory programs (Epstein, 2011).

Positive Impact of Family Involvement in Schools

There are several benefits of family partnerships with schools; most importantly, when families are involved, students do better. Previous research has found significant positive academic, social, emotional, and behavioral student outcomes when partnerships are established between families and schools (e.g., Epstein & Sanders, 2006; Gonzalez, 2004; Henderson, Mapp, Jonhson, & Davis, 2007; Hill & Tyson, 2009; Jeynes, 2005). Examples of academic and school outcomes and social, emotional, and behavioral outcomes are provided below.

Academic and School Outcomes

Multiple meta-analyses concluded that parental involvement in elementary school (Jeynes, 2005) and middle school (Hill & Tyson, 2009; Jeynes, 2007) is positively related to academic achievement (e.g., class grades, grade point average, standardized test scores). For example, a meta-analysis of 41 studies found a large effect (ES ranged from 0.70 to 0.75) for the relationship between overall parental involvement and urban elementary school students' academic achievement (Jeynes, 2005). With regard to urban secondary students, a meta-analysis of 52 studies found moderate effects (e.g., ES = 0.38 for studies with sophisticated controls; ES = 0.53 for studies without sophisticated controls) for the association of overall parental involvement and students' academic achievement outcomes (e.g., combined academic achievement, grades, standardized tests, and teacher rating scales) (Jeynes, 2007). The positive relationship between parental involvement and academic achievement for both meta-analyses (Jeynes, 2005, 2007) remained when the data were disaggregated by gender and race. Importantly, a longitudinal study found that increased family involvement in school reduced the achievement gap in students from low-income families (Dearing, Kreider, Simpkins, & Weiss, 2006).

In addition to improved academic performance, parental involvement in school is associated with other school success outcomes, such as an increase in students' daily attendance (Chang & Romero, 2008; Henderson & Mapp, 2002), lower rates of high school dropout (Barnard, 2004; Hoagwood, 2005; Jeynes, 2005; Marcon, 1999), and more on-time high school completion (Barnard, 2004; Hoagwood, 2005; Jeynes, 2005). Barnard (2004) analyzed data from the Chicago Longitudinal Study (i.e., $N = 1{,}165$ students from inner-city Chicago) to examine the relationship between parental involvement in elementary school and school outcomes in high school. After family background characteristics (e.g., years of intervention, subsidized lunch, parent education,

parent employment status, parent marital status, student race, student gender) and risk factors (e.g., social and cognitive indicators for the child) were controlled, results suggested that parental involvement in school was significantly related to lower rates of high school dropout, increased on-time high school completion, and highest grade completed. Barnard concluded that early parental involvement in school is critical for long-term school success. Taken together, schools should be encouraged to strive to improve student's academic achievement and success by implementing specific activities that engage and meaningfully involve families with their schools and communities.

Social, Emotional, and Behavioral Outcomes

Family-school collaboration significantly improves behavioral functioning (e.g., Atkins et al., 2006) and social and emotional skills (e.g., Mart, Dusenbury, & Wiessberg, 2011). Students' behavior improves and disciplinary actions are reduced when educators communicate and involve families in student behavior plans (Epstein, 2005; Sheldon & Epstein, 2002) and when educators utilize specific practices to involve parents (Sanders, 2005). In addition, the amount of family participation in the development, implementation, and evaluation of school mental health services is an essential factor for service quality and treatment outcome (Hoagwood, 2005). For example, family involvement is associated with enhanced mental health service coordination (Koren et al., 1997) and better adjustment for children (Taub, Tighe, & Burchard, 2001). Taken together, FSC partnerships have a significant impact on children's academic and school outcomes and social, emotional, and behavioral functioning.

Qualities of Effective Family-School-Community Partnerships

Given the significant impact of FSC partnerships in helping students' well-being and academic progress, it is important to consider qualities of successful partnerships. The National Federation of Families for Children's Mental Health (http://ffcmh.org/) is a national family-run organization that provides advocacy, leadership, and technical assistance to help ensure that children and youth with emotional and behavioral challenges and their families have the necessary services in order for these children and youth to be successful. The National Federation strongly encourages a family-driven approach in which families are largely the decision maker for their children's care and have an influence on the policies and procedures for all children across local, state, and national levels. One example of an approach that provides a framework for FSC partnership for planning and developing services and supports for children and youth with emotional and behavioral challenges is a system-of-care approach (Sebian et al., 2007). The core values of a system-of-care approach include being child-centered, youth-guided, and family-driven. Further, consistent with the goals of the National Federation of Families for Children's Mental Health, one of the principles of system-of-care is to ensure "family participation in all aspects of planning, service delivery, and evaluation" (p. 3, Sebian et al.).

Previous research has provided evidence to support the principles discussed above and the need for partnering with families. Weist and colleagues (Weist et al., 2005) developed ten principles for best practice in school mental health based on a national sample of key stakeholders from the fields of education, school health, and mental health. Relevant to this chapter, one of the ten principles states: "Students, families, teachers, and other important groups are actively involved in the program's development, oversight, evaluation, and continuous improvement" (p. 9, Weist et al.). This suggests that families should be largely engaged as a partner with schools and communities *across all levels of programming* rather than families being minimally involved as an afterthought or late in the process, or just to give approval to what was decided by the school team. Similarly, the School Mental Health Capacity Building Partnership conducted an analysis to identify the top critical factors for advancing school mental health policy and practice at the state level (Stephan, Hurwitz, Paternite, & Weist, 2010). Stephan and colleagues' findings recognize

family members and youth as the most important stakeholders in school mental health and argue that it is critical for schools and mental health providers to promote full partnerships with youth and families and diverse youth and families to be engaged in all aspects of school mental health policy and program development. In sum, meaningful and comprehensive family partnerships with schools and communities have been nationally recognized as a critical component of best practices for school mental health.

The Role of a National Community of Practice

One mechanism for advancing a "shared agenda" involving families, schools, and communities is through a Community of Practice whose purpose is for groups of people who share concerns, problems, and/or interest in particular topics to deepen their own knowledge base and effectiveness by interacting on a regular basis with similar individuals, termed practice groups (Wenger, McDermott, & Snyder, 2002). "Communities of practice emphasize the learning that people do together rather than individual specialties or roles such as parent, teacher, administrator, or other expert" (p. 20; Price-Mitchell, 2009). The National Community of Practice (National CoP) on Collaborative School Behavioral Health (www.sharedwork.org) is co-facilitated by the IDEA Partnership at the National Association of State Directors of Special Education (NASDSE, funded by the Office of Special Education Programs) and the national Center for School Mental Health (CSMH) at the University of Maryland School of Medicine (funded by the Health Resources and Services Administration). The National CoP offers a mechanism for helping to build partnerships in school mental health and provides practical examples of states that are having some success in advancing these collaborations (see www.sharedwork.org). Currently, there are 12 practice groups within the National CoP that are (a) developing a shared agenda across education, mental health, and families by collaboratively working together and (b) pursuing a shared FSC agenda in advancing organized statewide action in school mental health. The Families in Partnership with Schools and Communities Practice Group, specifically focused on building FSC partnerships, is highlighted here.

Families in Partnership with Schools and Communities Practice Group

History

The National CoP initially convened diverse stakeholders in Dallas, Texas, in 2004 to discuss the most critical issues to advance school mental health at the local, state, and national level. One of the eight critical issues identified during this landmark convening was the importance of supporting families' voice and participation in all aspects of school mental health. Subsequently, the Family-School-Community Partnerships Practice Group was formed and led by both family members and non-family member professionals to address this critical issue. This early group languished and there were few accomplishments or sustainable activities. In late 2006, the leadership of the National CoP recognizing the value of an active family-driven practice group helped to rebuild the Family-School-Community Partnerships Practice Group. To ensure their sustainability, the group crafted a rotating leadership model with a variety of family leaders from Illinois, New York, the District of Columbia, Texas, California, Hawaii, Pennsylvania, and South Carolina agreeing to take turns serving in the three facilitator positions. Common barriers to family leadership include the competing demands on family members' time, and these are multiplied for families who also fill professional roles. Shared leadership among this group has enabled them to provide consistent participation in the larger community and collaborative family-driven initiatives.

Accomplishments

The Family-School-Community Partnerships Practice Group and leadership team has achieved several accomplishments. During the Annual Conference on Advancing School Mental Health, co-hosted by the CSMH and IDEA Partnership, the practice group facilitates breakfast and lunch group discussions that have been used to introduce the practice group and the

National CoP construct as well as develop its mission which is stated as: "*Our mission is to provide information and education for families to ensure their participation as full partners who advocate and build leadership with or in schools and community."* To more accurately reflect this mission and the focus as family as the heart of their work, in 2011, they changed their name from Family-School-Community Partnerships to Families in Partnership with Schools and Communities (FPSC).

The FPSC Practice Group has successfully communicated its mission and priorities across the National CoP and strives to ensure that other practice groups have access to authentic family-driven partnerships across the myriad activities of the entire community. For example, members of the FPSC Practice Group are active in other practice groups and invite and welcome family members and other invested stakeholders to take part in their group. As the mission implies, the practice group believes that without the deliberate creation of family-driven initiatives and widespread inclusion of family and youth voices, even well-intentioned initiatives run the risk of losing touch with current priorities that are relevant to families. Families bring multiple and diverse perspectives across issues, as well as a sense of urgency that provides important energy to sustaining change processes. To ensure that programs are family driven and to make certain of family buy-in and commitment, it is critical to actively seek family voices (Mart et al., 2011).

One of the twelve specialty tracks at the Annual Conference on Advancing School Mental Health is the FPSC track. To have high quality presentations that are consistent with the FPSC mission, the proposals are subjected to a peer-review process conducted by the FPSC Practice Group. In addition to the Conference, the practice group effectively communicates their activities and work through the National CoP and beyond by displaying their ongoing work on the National CoP website (www.sharedwork.org). The *Sharedwork* website utilizes interactive features to disseminate information to stakeholders in an accessible and user-friendly manner.

Family-Driven Definition of Family Engagement

To date, the largest activity and greatest accomplishment of the FPSC Practice Group is a project that began in 2008 for the National Coordinating Committee on School Health and Safety (NCCSHS). The practice group was charged with generating a family-driven definition of family engagement. While the practice group leaders were family members of children and young adults with mental health needs, it was necessary to reach out to other families across the country in order to develop an authentic and broader perspective. The practice group developed a survey and disseminated it nationally via the National CoP website. Thirty families voluntarily completed the survey and provided (a) definitions of the term "family driven," (b) descriptions of differences in family engagement across systems (e.g., mental health, health, juvenile justice, schools, child welfare), (c) examples of when families felt engaged or disengaged, and (d) facilitators and barriers to family engagement. While their survey was not initially conceived as a research study, the volume and richness of the data warranted a formal analysis. Their survey results were published in the international journal *Advances in School Mental Health Promotion* (see Fette et al., 2009). A brief summary of the process and results are provided below.

The leadership team of the FPSC Practice Group utilized grounded theory to systematically analyze the qualitative data in order to fully capture all of the families' voices. Two practice group members independently completed initial line-by-line coding of the data, and then other members completed axial and selective coding of the data. Based on the findings, the following definition of family engagement was formed: "*Family Engagement is an active and ongoing process that facilitates opportunities for all family members to fully participate and contribute in decision making for their children, plus meaningful involvement in specific programs and with other families"* (p. 9; Fette et al., 2009).

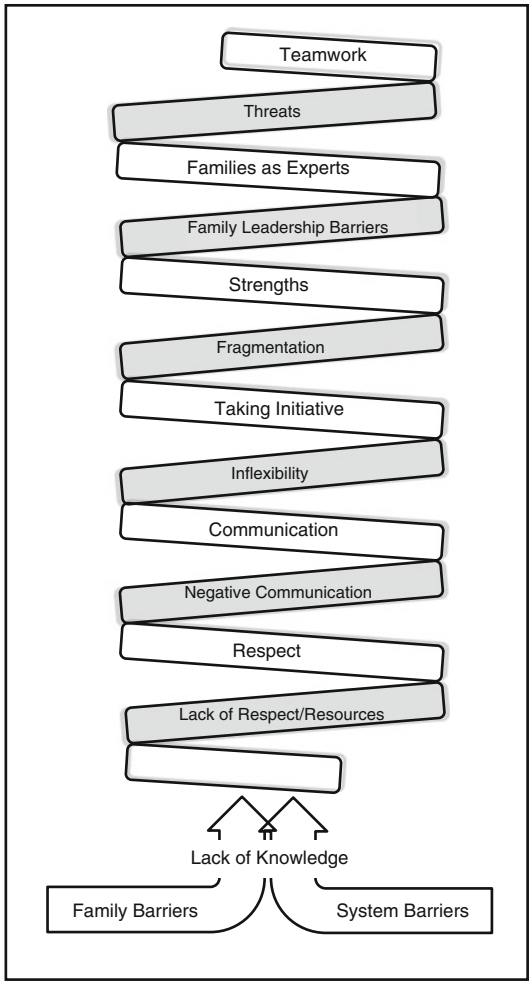

Fig. 1 Family engagement process and spatiotemporal model (Note: The figure above was reprinted with permission from *Advances in School Mental Health Promotion* (see Fette et al., 2009 for original article))

Further, the Spatiotemporal Model of Family Engagement, displaying fifteen themes of family engagement (see Fig. 1), was formulated (Fette et al., 2009). The model suggests that engagement is a developmental process in which factors that facilitate engagement should be deliberately increased; whereas, factors that hinder engagement should be reduced. In addition, the model assumes that behaviors decreasing engagement occur normatively as transitional responses in times of stress.

Three of the themes in the Spatiotemporal Model of Family Engagement are related to barriers to family engagement, namely, family barriers, system barriers, and overall lack of knowledge (Fette et al., 2009). Family barriers include isolation, history of negative experiences, fear, mistrust, and lack of knowledge of systems and effective practices. In addition, systems roadblocks include stigma, negative attitudes, conflicting administrative agendas, and lack of knowledge regarding mental illnesses, mental health needs, and effective practices. The remaining thirteen themes are organized into a spiral in which factors that *impede* engagement are depicted on the *back* rungs and factors that *facilitate* engagement are depicted on the *front* rungs. Behaviors and conditions that impede engagement include lack of resources and respect, negative communication, inflexibility, fragmentation, barriers to family leadership, and threats.

Conversely, there are several strategies, including respectful communication, strengths-based and collaborative approaches, and training, that increase family engagement and will in turn help to foster FSC partnerships and student success (Fette et al., 2009). Table 1 highlights several strategies that should be implemented early and continue through transitions, as well as be included in informal and formal activities. Engagement begins with being respectful by listening to the family's hopes and dreams and valuing their individual culture. Communication is also an essential component for family engagement because families want to be heard, included in decisions, and given honest information. The findings also suggest that it is important to use a strengths-based approach by building on child and family strengths while decreasing the focus on child and family deficits. Families should be part of collaborative and responsive teams.

The findings in Table 1 also highlight the role for educators and the importance of the team process. Teachers should take initiative by advocating proactively, asking for parental input, building opportunities for success, and taking a broader view of families' role. Families should be "at the table" as an equal partner on the team

Table 1 Strategies to increase family engagement

Strategy	Definition
Respect	Value families' wishes. Respect their culture
Communication	Listen to families' opinions and include them in decision-making
	Provide psychoeducation
Initiative	Purposefully ask for family input
Strengths based	Build on child and family strengths. Decrease focus on child and family deficits
Families as experts	Recognize families' expertise
Teamwork	Include families as part of collaborative, responsive team

and in the decision-making process. Similarly, families should be recognized as the experts on their own family, instead of the professional being viewed as the expert. Based on the qualitative study (Fette et al., 2009), the value of enhancing family engagement includes (a) school systems and processes become more inviting, welcoming, and family friendly, (b) the school culture appreciates the importance of listening and valuing the input of family members, (c) families are respected as equal team members and parents' input is valued in decision-making processes, and (d) relationships are based on trust and respect with students and families. As previously discussed, family engagement and partnership is associated with increased positive outcomes for students and a more positive school climate (e.g., Epstein & Sanders, 2006; Gonzalez, 2004; Henderson et al., 2007; Hill & Tyson, 2009; Jeynes, 2005)

While the Spatiotemporal Model of Family Engagement has not yet been validated through application and quantitative analysis, the FPSC Practice Group is extending the process to other groups at the time of writing this chapter. For example, Rebecca Sapien-Melchor, Vice President of Fiesta Educativa, Inc., is working on translating the FPSC Practice Group's survey (i.e., included in Fette et al., 2009) into Spanish and will engage families in the process of developing their own definition of family engagement that uniquely reflects their experience. Further, Staci Lee Rodarmel, a FPSC Practice Group Facilitator, is engaging youth in a similar process to support the development of a youth-driven definition of youth engagement as the focus of her dissertation work. Importantly, the qualitative study (Fette et al.) further strengthened the FPSC Practice Group's cohesion. In the process of collaboratively collecting data, families in the practice group strengthened their relationships and the capacity of the family component of the National CoP.

Challenges

Although the FPSC Practice Group has many accomplishments as outlined above, they have also experienced a few challenges related to sustaining a national practice group. The competing demands of professional and personal responsibilities impact the ability of members to stay continuously and regularly engaged. Some members of the practice group have positions that dovetail easily into the work of the practice group; whereas, other members must devote additional time outside of their primary job responsibilities to be actively engaged in the practice group. Further, many practice group leaders are caregivers of children/young adults with mental health needs who may have to manage their children's recurring needs and unexpected crises. Even with these challenges, this practice group is one of the more active groups in the National CoP (e.g., based on frequency of interactions of facilitators, communication with larger practice group, participation in other practice groups) and has contributed to the advancement of family, school, and community partnerships across local, state, and national level.

Case Examples of Successful Family-School-Community Partnerships

As previously discussed, there is great value to building FSC partnerships including positive outcomes for students and families, as well as positive outcomes for the entire school and com-

munity. Two case examples are presented below to help illustrate the development and processes for building strong FSC partnerships.

Baltimore City, Maryland

The University of Maryland School Mental Health Program (SMHP) has a long-standing partnership with Baltimore City Schools and Baltimore Mental Health Systems in Baltimore, Maryland, to provide a full continuum of mental health services (i.e., prevention to intervention) to students in general education. One of the longest partnerships with a school has been with Patapsco Elementary Middle School, a school primarily serving low income (over 95 % of students receive free or reduced meals; Maryland State Department of Education, 2011), African American students (99 %; Maryland State Department of Education, 2011).

Historically, family engagement and partnership with Patapsco was scarce; however, in the past several years, the school and its partners, including the SMHP, recognized the need for building relationships with families and the community. In 2007, Patapsco was given the opportunity to increase its efforts to engage families through a project designed to advance best practices in school mental health funded by four Baltimore foundations, including Aaron and Lillie Straus Foundation, Inc.; the Jacob and Hilda Blaustein Foundation, Inc.; the Abell Strauss Foundation; and the Zanvyl and Isabelle Krieger Fund, as well as support and resources from the CSMH. The collaborations between the SMHP, its funders, and the CSMH fostered incredible growth at Patapsco, with the greatest achievement being the development of multiple partnerships between families, the school, and the community that ultimately resulted in increased and sustained family involvement in school years after the project concluded.

One of the primary goals of the grant was to increase parent involvement at Patapsco with the hope that this would consequently help students become more successful. To reach these goals, the SMHP team in collaboration with Patapsco staff and based on input from and ongoing discussions with families created and implemented four family programming activities within the school. Weekly parent "Chit Chat" groups were created to encourage positive parent interactions, to provide psychoeducation on a variety of topics (e.g., child abuse and prevention, lead poisoning, depression, attention deficit hyperactivity disorder), and to teach and advance successful advocacy skills. One successful outcome from the Chit Chat groups was the addition of speed bumps and crosswalks by school after several parents attended a school board and advocated for their school and community. Monthly family nights were held to increase family presence within the school and to foster positive feelings about the school in general. For example, family events included game night, movie night, and arts and crafts. Similarly, monthly parent-teacher events, such as basketball, volleyball, and kickball games, were designed to increase positive interactions between parents and teachers and to build a sense of community within the school. Finally, a parent volunteer program was created to increase the number of parent volunteers within the school and to help build partnerships between school staff and parents. Parent volunteers served as hall monitors, cafeteria monitors, and classroom helpers with very clear job descriptions and expectations for their volunteer time. Importantly, even after the foundation funding ended, the Chit Chat groups, family nights, parent-teacher events, volunteer program, and partnerships have sustained at Patapsco.

Over the years, Patapsco has built partnerships not only with families but also with the community by partnering with the following community agencies: the Maryland Food Bank, the local Department of Social Service, the local hospital (Harbor Hospital), various local restaurants, the Baltimore Child Abuse Center, the Cherry Hill Trust, and neighboring universities (e.g., Johns Hopkins University, Towson University). By partnering with the Maryland Food Bank, Patapsco and the SMHP were able to enhance the parent volunteer program by offering food bags for all parent volunteers. Each year, since 2007, the Maryland Food Bank has given Patapsco an allowance to spend in their "grocery store" to

provide the food to those volunteering and those seeking emergency assistance. Not only has this helped the school provide an incentive to volunteers, but also it has helped the school, families, and communities come together.

In addition, Patapsco and the SMHP formed a partnership with the local social services agency in an effort to assist parents who are receiving financial support from state agencies. In Maryland, any person receiving social services must show that they are employed and/or participating in a work-training program. Patapsco and the SMHP partnered with the local social services agency in order to create a parent volunteer agreement, which contributed towards their required work hours. This was extremely beneficial to parents who were facing reductions in their financial assistance due to noncompliance with the required work hours. The arrangement was mutually beneficial to the school as they gained several motivated and helpful parent volunteers. Indeed, the partnership with DSS has significantly increased the number of parent volunteers. For example, the number of volunteer hours as in 2007–2008 school year was 469 hours; whereas, the number of volunteer hours in 2009–2010 was over 2,600 hours. Taken together, parents understand that the school is not just an institution committed solely to education, but rather it is an institution that is committed to the health, wellness, and success of all families in the community.

Erie, Pennsylvania

The Northwest Tri-County Intermediate Unit # 5, (IU# 5), a regional public education service agency in Erie, Pennsylvania, implements High Fidelity Wraparound (HFW) which is a team-based collaborative process that serves youth with complex mental health needs and multiple public system involvement. HFW is an evidence-based practice supported by the National Wraparound Initiative and the Youth and Family Training Institute in Pennsylvania. The HFW process is based on the following ten principles that are standardized by the US National Wraparound Initiative: (a) family voice and choice, (b) team based, (c) natural supports, (d) collaboration, (e) community based, (f) culturally competence, (g) individualized, (h) strengths based, (i) persistence, and (j) outcome based (Walker & Bruns, 2006). Most relevant to this chapter are family voice and choice, defined as eliciting and prioritizing family's values, perspectives, and preferences across all phases of Wraparound, and community-based principles defined as implementing services and supports in the most inclusive, responsive, accessible settings possible (i.e., least restrictive setting). The goals of HFW are to meet the needs identified by the family, improve the family's ability to manage their services, and develop or enhance the family's support system while building upon the family's strengths. Importantly, HFW creates individualized plans, by identifying the family's strengths and needs.

The HFW team includes family support partners and youth support partners as team members to help facilitate and encourage youth and family engagement. Support Partners are able to deeply empathize with families and youth because they have been in similar situations. These positions are critical to helping families engage in the HFW process, partner with schools and other community agencies, and collaborate with other mental health professionals. HFW staff, including support partners, receives intensive training and coaching and must complete a rigorous credentialing process. The HFW training begins with family engagement because without adequate family engagement, HFW will be ineffective. Staff members are taught engagement skills such as active listening; using a nonjudgmental approach; meeting families and youth where they are; conducting an assessment of strengths, needs, and culture; empowering families and youth to meet their own needs; and partnering with the other team members.

HFW's mission is to partner with schools, community agencies, friends, and family to support the youth and family in areas of need that are most important to them. For example, HFW in schools provides a mechanism for relationship building between school staff and families to help youth meet their educational requirements (e.g., graduation). HFW has a "no blame and no shame" philosophy in which the team

helps families to understand the school's system mandates. HFW also supports schools in understanding the family's needs so they can become part of the solution, as well as assist with the family's non-school-related needs. The HFW team is in constant communication with youth and families, as well as school-based and community-based mental health staff, teachers, principals, probation officers, and caseworks who are working with the family.

Taken together, HFW within IU #5 has helped to build FSC partnerships and has successfully empowered youth and families to have stronger support systems. As evidence of HFW's success in engaging and partnering with youth and families, the team for HFW at Northwest Tri-County Intermediate Unit #5 was the first award recipient of the Youth and Family Partnership Award given by the national Center for School Mental Health and IDEA Partnership at the 16th Annual Conference on Advancing School Mental Health in September 2011. These two case examples provide real-world examples of successful FSC partnerships, as well as an illustration of the positive impact of these collaborations.

Conclusions and Recommendations

This chapter reviewed the literature in the mental health and education fields that considers the value and impact of FSC partnerships. The mission and activities of the Families in Partnership with Schools and Communities Practice Group of the National Community of Practice on Collaborative School Behavioral Health were reviewed as an illustration of work at the national level that is advancing FSC partnerships, and practical and real-world examples of forming FSC partnerships were provided. While there are numerous action steps that could move FSC partnership forward in the long term, we offer a few immediate action steps that schools can take to begin to advance partnerships with families and communities. These action steps, guided by research findings, theories of effective FSC partnerships, and lessons learned from the FPSC Practice Group and two successful FSC partnerships (Patapsco School, and Northwest Tri-County Intermediate Unit # 5 High Fidelity Wraparound Program), are summarized below:

1. Invite family members and community organizations/representatives to be members of school teams at the beginning of the process (i.e., when the team is just being formed). As an example, the administrators could outreach to family members and community organizations to invite them to be an active part and a full member of the school climate committee, school improvement committee, or other relevant school committees.
2. Create a leadership team at the school or district level comprised of diverse individuals who are committed to building FSC partnerships. For example, a school family council consisting of teachers, youth, administrators, family members, and community leaders could meet to collaboratively discuss and problem solve issues related to school climate and student success.
3. Organize and regularly schedule nonacademic events to develop relationships between schools, families, and communities. For instance, parents/caregivers versus teacher sporting events (e.g., basketball, soccer), movie nights, and game nights held at schools or community centers can help encourage positive interactions and build trust.
4. Emphasize the strengths and assets of all children and families during caregiver-teacher conferences, school team meetings, and other communication between home and school. Teachers could send home positive notes to caregivers to highlight successes in the classroom.
5. Take the time to communicate with caregivers as to what has worked and not worked in the past based on their experiences with the child. Ask for and integrate caregiver suggestions and concerns when developing treatment strategies.

Future Directions

To further advance the school mental health field, it is imperative to partner effectively with families and communities. Researchers can add to the field by identifying the most effective components of building and sustaining FSC partnerships. In addition, it is important to gain a better understanding of the causal role of these partnerships on children's academic progress and well-being, including at critical transitions (e.g., to elementary school, to middle school, to high school, to college and/or career) . Finally, given the limited nature of teacher and support staff preparedness on building partnerships, education and training for school staff on forming and maintaining meaningful and effective partnerships with families and communities should be further developed and evaluated.

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Increasing Parental Engagement in School-Based Interventions Using Team Engagement and Motivation Methods

Keith C. Herman, Wendy M. Reinke, Catherine P. Bradshaw, John E. Lochman, Lindsay Borden, and Dana Darney

It is clear from extensive research that when families are involved in their children's education, children do better in both the short and long terms (Dearing, Kreider, Simpkins, & Weiss, 2006; Hill & Craft, 2003). Benefits of family involvement in education include higher academic achievement (e.g., Epstein, 1991), increased support of teachers and schools from parents (e.g., Epstein, 1986), improved behavior, and increased likelihood of enrolling in postsecondary education programs (e.g., Henderson & Mapp, 2002). Family involvement in educational and mental health services is critical to the success of all students, perhaps especially those with emotional and behavioral disorders (EBDs) (Henderson & Mapp, 2002; Kumpfer & Collings, 2003).

Without family involvement, it is unlikely that adequate supports can be developed at school to avert the long-term negative outcomes for students with the most serious and persistent behavior problems in schools (Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). The majority of effective treatments for youth have shifted from child-focused interventions to family-centered services that require significant parental participation throughout the process (Fauber & Long, 1991). The effectiveness of treatments for both externalizing and internalizing (Clarke et al., 1992) problems in youth has significantly improved as more of these family-centered interventions have been developed. Educational and mental health services or interventions that do not address family practices typically have limited impact, and several interventions that do not address family practices have actually proven harmful (Dishion, McCord, & Poulin, 1999).

Unfortunately, families are not routinely involved in the planning and implementation of behavior support teams. Most families, when invited to these teams, are simply there to complete forms even though this is in direct contrast to the principle of family participation in the *Individuals with Disabilities Education*

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Improvement Act (U.S. Department of Education, 2006). In particular, families from low-income backgrounds and those with children with the highest service needs have the lowest level of school participation (Park, Pullis, Reilly, & Townsend, 1994).

Caregiver decisions about involvement in and ability to participate in their child's education are determined by a complex interplay of personal and situational variables, including historical and contextual factors that make schools unwelcoming to many parents (Stormont & McCathren, 2008). Singular interventions (e.g., homeschool notes) without such contextualization are unlikely to impact the caregivers with the greatest barriers to participation.

In this chapter, we describe our team engagement and motivation (TEAM) model which focuses on enhancements to traditional behavior support and educational planning teams to bolster active engagement by caregivers (any adult involved in direct care of the child) and school personnel in planning supports for students with EBDs. The complexity of presentations of youth with EBDs, including their families' cultural, perceptual, and socioeconomic circumstances, requires an integrated and planful approach to intervention development, implementation, and monitoring. We also describe the process by which behavior support teams can be created and trained to build contextually relevant interventions that address the multitude of service access barriers, including structural, perceptual (including staff and parent negative perceptions and reputations), and technical (conducting FBAs and function-driven BSPs).

Background

Conceptual Model of Parent Involvement

The conceptual model underlying TEAM takes into consideration factors that are likely to promote parent involvement as well as pathways linking increases in parent involvement to improvements in student outcomes (see Fig. 1). Our definition of parent involvement is based on the multidimensional model of parent involvement (Kohl, Lengua, & McMahon, 2000), which specifies six unique aspects of parent involvement in school: parent-teacher contact, parent involvement at school, quality of parent-teacher relationship, teacher's perception of parent, parent practices at home, and parent endorsement of school.

The logic for methods to foster parent involvement draws upon the Unified Theory of Behavior Change, an integration of well-established theories explaining how and why people modify their behavior (Jaccard, Dodge, & Dittus, 2002). The Unified Theory specifies the immediate determinants of behavior (constraints, skills, salience, and habits) as well as those that promote the intention to change (e.g., to participate in school services). We focus on five of these factors that recent studies have shown to be malleable precipitants of parent involvement: positive attitudes/expectations, accessibility, social influence, self-efficacy, and salience (Nock, Ferriter, & Holmberg, 2006). The theory and supportive studies suggest that parents are most likely to participate in school services for their child if they perceive the following: (a) the school as welcoming, accessible, and open; (b) participation as typical, acceptable, and doable; and (c) the likelihood of a favorable investment return on their participation (more benefits relative to costs).

Our conceptual model links these proximal changes in parent involvement to distal improvements in student behaviors including academic performance. Based on a coherent and influential theory of motivation (Deci & Ryan, 1985), Connell's (1991) developmental model describes the sequential process by which parent and teacher behaviors influence student motivation and achievement. Improvements in parent involvement have a positive impact on a child's emerging perceptual, self, and behavioral systems, most immediately their sense of competence and relatedness (Connell, Spencer, & Aber, 1994). A long line of research has shown that these factors have direct effects on promoting student engagement in school, which in turn is most directly linked to academic performance in elementary and secondary students (see Pianta & Allen, 2008). In one recent study, the effects of parent involvement on student achievement were fully mediated by

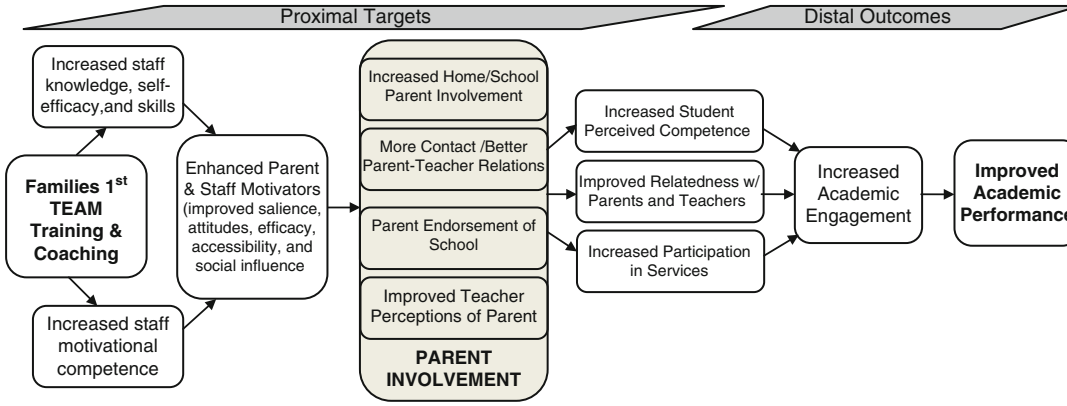

Fig. 1 Conceptual model for promoting parent involvement and expected outcomes

changes in student perceived competence and improved student-teacher relations (Topor, Keane, Shelton, & Calkins, 2010).

School-Based Barriers to Parent Involvement and Motivation

Efforts to involve families in educational and behavior support planning need to be attentive to the well-documented structural, contextual, cultural, and perceptual barriers that interfere with initial and sustained participation of caregivers in services for their children. Socioeconomic disadvantage, ethnic minority status, severity of child dysfunction, parent stress and depression, lack of support (including caring for children and elderly parents), lack of knowledge and skills, and lack of confidence all play a significant role in influencing whether a family is able and willing to seek services (McKay et al., 2004; Nock & Kazdin, 2001). When youth experience emotional or behavior problems, their caregivers have typically had many interactions with educational and mental health service systems (many aversive), and this history may influence decisions about continuing involvement. For instance, repeated calls to home by school staff to report behavioral infractions may lead parents to decide to avoid contact with school personnel. In addition, caregiver perceptions of the teacher and school personnel relationships, ongoing calculations of benefits to costs of seeking care, mismatched expectations between parents and school personnel, and caregiver perceived involvement in service planning all impact the likelihood families will persist in seeking services for their child (see McKay et al., 2004). Structural obstacles such as limited service availability, transportation, insurance, childcare, and time also play a role in parents' decisions (McKay et al., 2004; Nock & Kazdin, 2001).

Many aspects of the school environment, including biases and negative perceptions of school staff, also may make them unwelcoming to parents (Stormshak, Dishion, Light, & Yasui, 2005). Many of the mental health intervention needs these children and their families have may be perceived to fall outside of what some school personnel believe their roles are within school settings (Reinke, Stormont, Herman, Puri, & Goel, 2011). Perhaps the most important barrier is that most school professionals are trained in an individual-centered model of service delivery which rarely incorporates parents (Stormshak et al., 2005). By implementing a narrow, rigid educational plan that is unable to support the needs of parents, the likelihood of low participation, lack of engagement, and perception of unhelpfulness is significantly increased (Epstein, 1995).

Evidence-Based Approaches to Fostering Parent Involvement

A growing body of research has shown the necessary ingredients for overcoming these barriers

and for promoting family engagement in services for their children. This literature is largely an extension of the considerable research base that has described the motivational, perceptual, and practical barriers that impede adult participation in mental health, drug and alcohol, and other health services (Miller & Rollnick, 2002). In particular, researchers have identified many modifiable factors that can promote or impede family participation in child mental health services (McKay et al., 2004; Nock & Kazdin, 2001). Additionally, findings about the role of social influence, attitudes, efficacy, and salience in human decision-making have informed efforts to successfully influence participation rates (Winslow, Poloskov, Begay, & Sandler, 2013).

Parent Engagement and Social Marketing

Effective parent engagement strategies must directly address the well-documented barriers to care (Herman et al., 2011; McKay et al., 2004). Several articles have provided excellent details for making services more accessible to families (e.g., Webster-Stratton, 1998). These include offering services at flexible times, providing meals and childcare for participation in family-focused interventions, and providing incentives for participation. Beyond structural barriers, parent attitudes and expectations about participating in services are shaped by interactions with other school personnel and social service providers over time. These historical antecedents to parent intention to participate are often the most hidden and least discussed barriers to participation, but also the most important leverage points in facilitating change. Thus, school personnel need to be trained to discuss these past experiences (McKay et al., 2004). Relatively simple strategies to foster positive expectations that clinicians can use at every point of contact with caregivers can nearly double family participation rates over time (McKay et al.; Winslow et al., 2013).

Motivational Interviewing (MI)

MI is a client-centered, nonconfrontational, directive approach to intervention designed to help individuals resolve ambivalence and enhance motivation to change (Miller & Rollnick, 2002). MI provides the ongoing interaction style and framework for making it more likely that caregivers will perceive the benefits of initial and ongoing help seeking as outweighing any barriers. Additionally, the MI methods apply equally well to working with school staff (see Reinke, Herman, & Sprick, 2011) and have shown significant promise within the context of school mental health applications (Frey et al., 2011). The basic premise of MI is that people are most likely to become motivated to change when they perceive discrepancies between their values and their behaviors. By using MI, clinicians attempt to elicit value statements as well as concerns about the status quo, reasons for changing, commitment to change, and optimism that change is possible.

The Team Engagement and Motivation (TEAM) Model

The TEAM model integrates these evidence-based practices for promoting family involvement within a school delivery system that focuses on enhancements to traditional behavior support and educational planning teams (e.g., Student Assistant Teams, IEP Teams). In most schools, these teams are charged with gathering data and engaging all relevant partners in planning and implementing selective or indicated supports. Given the importance of these teams in determining outcomes for students with EBDs, these team members are the most logical conduits of effective parent involvement practices in schools.

TEAM Training and Support

Student support teams need to have competence in both the technical and motivational aspects of assessment and behavior support planning to involve and engage all relevant partners in the planning and implementation process. Over the past several years, our group has developed and piloted TEAM strategies (Reinke, 2013) to address these social aspects of behavior support team functioning. TEAM is based on motivational

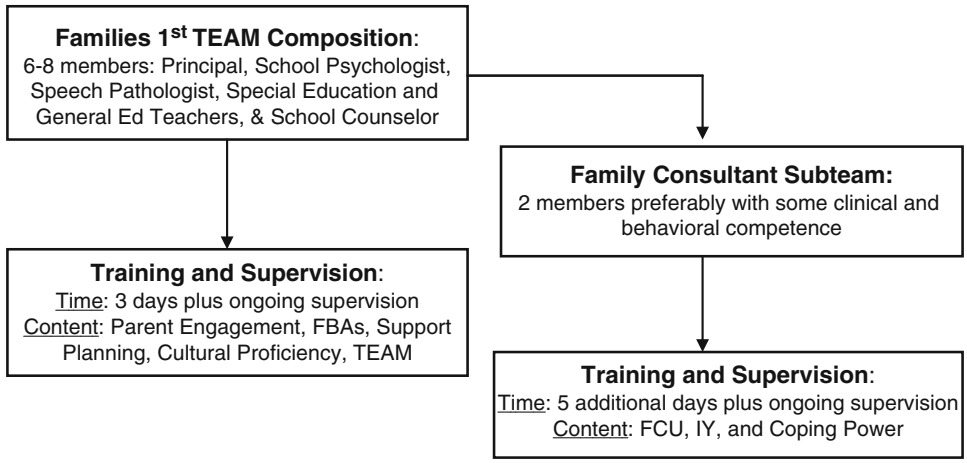

Fig. 2 TEAM composition and training

interviewing principles and motivational science. One innovative aspect of the TEAM model is that we have applied these well-documented motivational methods and procedures to school-based teams, not just individuals on the team (e.g., parents or teachers). By building these basic motivational strategies into the activities of the school-based team, we have found that we can effectively address the numerous perceptual barriers of staff and families that so often interfere with the success of behavior support plans and, more generally, that undermine family participation in school-based services, whether through their own unwillingness or ability or through a failure on the part of the school to appropriately invite and welcome parents to be a part of the process.

TEAM Composition

The core TEAM members consist of six to eight school staff members including the building principal, a special education teacher, school psychologist (or equivalent), speech pathologist, one or more general education teachers, and a school counselor or social worker (see Fig. 2). Prior work has found that schools needed a critical mass of professionals trained in these methods to be effective (Chaparro, 2011). A building administrator needs to be an active participant on the team to provide administrative leadership and support as well as the ability to reallocate existing resources as needed so that the TEAM can be empowered to make decisions (Chaparro, 2011). Administrative support is especially needed to help address some of the structural barriers to parent participation by arranging transportation, childcare, and other services. Ideally, TEAM members are already part of an existing school team such as an IEP Team, Student Support Team, and/or PBIS team, and the methods below are simply intended to bolster the skills and capacity of natural implementers. Referrals for services can be made for students with any level of need ranging from students with their first referral to a behavior support team to students with IEPs and persistent behavior problems.

At least two, but up to four, members of the TEAM form a family consultant subteam, which receives additional training and supervision for leading the TEAM through the technical and motivational processes. Optimally, these family consultants are identified as those having the most prior training in functional behavioral assessments (FBAs) and behavior support plans (BSPs) and are the ones who will work directly with families in engaging them in services. All TEAM members also need to have competencies in cultural proficiency, conducting technically adequate FBAs and developing sound BSPs, leading effective team meetings, and using motivational interviewing/family engagement strategies.

Technical Competence Training

One premise of the TEAM model is that families are more likely to participate on school-based teams and in other services if they perceive the teams to be competent and beneficial. Thus, all TEAM members receive training in technical aspects of FBAs and BSPs (for more resources on FBAs and BSPs, see Crone & Horner, 2003). Based on past experiences in training teams, all TEAM members participate in 2 days of training focused on technical aspects of conducting FBAs. Given that the persistent behavior problems of many students with EBDs are maintained by escape or avoidance (Asmus et al., 2004), special attention is allotted to planning supports for these types of behaviors.

Social, Cultural, and Motivational Competence Training

A related premise of the TEAM model is that families are more likely to participate on school-based teams and other services if the team is attentive to common social, cultural, and motivational barriers to participation. Thus, embedded within the 2-day technical trainings, all TEAM members receive basic training in parent engagement principles, motivational interviewing, cultural proficiency, support planning, and aspects of effective team meetings. Part of this training also addresses the known structural barriers to parent participation and strategies for overcoming these (Webster-Stratton, 1998). Ongoing supervision is a vital component to support the TEAM with these newly developed skills.

Family Consultant Subteam Training

The members of the family consultant subteam receive a more in-depth 3-day training and ongoing supervision in motivational interviewing, team leadership, parent engagement, and parenting interventions. Critical aspects of this training include how to facilitate effective meetings, manage typical challenges in meetings, monitor fidelity and progress, and use motivational principles to gain agreement on goals and devise and implement effective plans. The family consultants are also trained to collect and deliver performance feedback to teachers or TEAM members implementing intervention components. Research clearly documents that ongoing performance feedback is a critical support for sustained implementation of new practices in context (e.g., Reinke, Lewis-Palmer, & Merrell, 2008; Lochman et al., 2009).

Consistent with evidence-based parent engagement methods, the family consultants are trained to conduct a 30-min phone interview (or in person meeting) with parents to provide information and gain initial interest and engagement. The phone interview focuses on identifying the parent's perceived needs and goals and then linking these to aspects of the intervention (e.g., building salience). Additionally, the family consultants assess any obstacles that might interfere with participation and develop plans to overcome them. Family consultants are also given strategies for capitalizing on social influence after the phone contact including strategies for helping parents come to see service participation as normative and doable. For instance, they might arrange presentations for teachers about the services offered by the TEAM and then gain endorsements from teachers about these services. Teachers are encouraged to have brief 5-min conversations with target families about the practices and give an explicit recommendation to participate. A recent study found that these types of social marketing strategies were found to yield enhanced family participation in schools with low-income Spanish-speaking families (Winslow et al., 2013).

School-Enhanced Family Check-Up

The TEAM methods provide a flexible set of strategies for promoting family engagement and removing common barriers to school participation at every contact. The specific intervention steps are guided by the School-Enhanced Family Check-Up (SE-FCU). The original FCU was developed as a structured, brief, and effective family and school intervention for youth with mild to serious emotional and behavioral concerns (Dishion & Kavanagh, 2003). Typical targets of the FCU include parenting behaviors

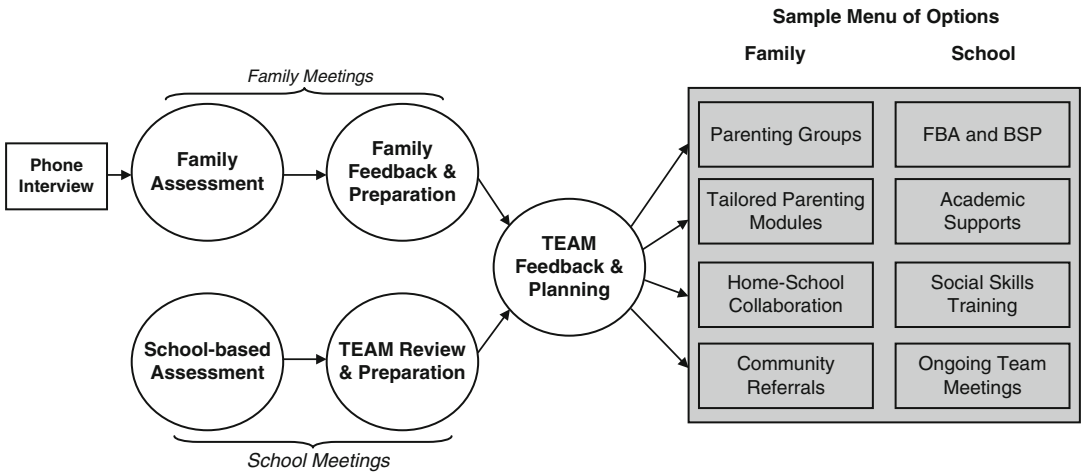

Fig. 3 SE-FCU model and steps

(e.g., discipline practices, monitoring) and child externalizing behaviors. Previous research indicates that the FCU increases parent engagement and leads to reliable reductions in problem behavior in children and adolescents (Connell, Dishion, Yasui, & Kavanaugh, 2007). Further, the families most in need of intervention services (e.g., single parents, high-conflict homes, high deviant peer involvement) engage more consistently in the FCU.

We developed a School-Enhanced FCU (SE-FCU) to strengthen the model for application in school settings by natural implementers (see Fig. 3). In the SE-FCU model, a family consultant arranges two meetings with the families of students with EBDs: the first meeting to build a relationship, foster motivation, and collect family and child assessments and the second meeting to deliver feedback about the assessments and prepare them for a meeting with the school TEAM. Around the same time, members of the TEAM compile school data and meet with school personnel and teachers involved with the student. The purposes of these meetings are to gather assessment data, repair negative reputations, build positive expectations of all partners, and prepare them for a successful whole team meeting. The family consultant then arranges a whole TEAM meeting that includes the parents. During this meeting, the family consultant shares relevant assessment data using a structured feedback form and motivational interviewing strategies. Based on this feedback, the TEAM develops a menu of options that includes school and family services. Parents choose one or more items from the family services menu, and then the entire team reaches consensus in selecting options on the school services menu. The meeting concludes with a detailed plan of action which might include subsequent meetings to finalize and review the behavior support plan.

Evidence-Based Parenting Programs

The purpose of the SE-FCU process ultimately is to increase family and team involvement in intervention planning and to increase the likelihood that parents will become more involved in a variety of services. One potential outcome is for families to participate in an evidence-based family parenting intervention, such as the Coping Power Program (Lochman & Wells, 2004). Not only are these programs evidence-based interventions for youth with EBDs, they are also exceptional training approaches for improving school practitioners' competence in best practices for consulting with families.

In one of our active projects, we have integrated the FCU with the parent component of Coping Power (Herman et al., 2012). Coping Power is a well-established and widely disseminated school-

based program for working with parents of upper elementary grade students with behavior problems (Lochman & Wells, 2004). The standard parent component consists of 16 parent group sessions, during which parents meet in groups of 10–12 with two coleaders. In our modified model, however, we have created a tailored version of the program so that parents can select modules to work on individually with clinicians based on their identified needs and preferences. Initial indications suggest that school-based practitioners find the model to be practical and appealing to the families they serve. Such an adaptive approach is consistent with the TEAM model and may make it more likely families will engage in school-based services.

Arranging and Leading Family and TEAM Meetings

One likely outcome of the second family meeting and the action-planning stage is a meeting between the family and school personnel. The purpose of this meeting is to create a support team to develop and finalize a plan for supporting the student at home and at school. This meeting is often the key leverage in moving the family and school personnel forward in improving services for the child. Thus, preparing for and facilitating these meetings is a critical skill for family consultants.

Preparation

Preparation for the meeting truly begins from the moment of referral. From the first contact with the school personnel and with the child and family, family consultants should avoid engaging in any ongoing negative dialogue about the other party. Often for children with recurrent behavior problems, school personnel and families have developed contentious relationships. Families may complain that the school is neglecting their child or unfairly targeting their child as having behavior problems (e.g., labeling them, enforcing inconsistent rules for other students). Some families will also state that the problem must lie with the school or with the teacher because the child only has problems in that setting. Teachers may reveal concerns to consultants about the family's level of motivation or involvement with schooling. They may also complain about the child being willful and implicitly or explicitly communicate that the child or family situation is hopeless. Throughout contacts with all parties, it is critical for family consultants to avoid communicating agreement with these perceptions, tacitly or otherwise. Likewise, it is important to be conscious of not encouraging lengthy discussions of these perceptions.

Building Positive Perceptions

In addition to avoiding communicating negative perceptions about each party, it is also important to gradually build new perceptions for each party about one another. In the situation where both parties already have favorable views of each other, it is helpful to strengthen these perceptions. The way to build positive perceptions is to actively plant them during meetings with families and teachers. For instance, when meeting with families, it is helpful to make favorable comments about specific actions the school is taking or observations the consultant has made. When working with the teacher (and the principal), it is important to share favorable comments about the family with them: "I visited them last week, and I've been impressed with how much they are already doing to help Jon be successful. Did you know that Jon's dad takes him to boxing every week at the Y to practice his self-discipline?"

The Meeting

It is important for family consultants to prepare an agenda and discuss ground rules at the start of the meeting (e.g., one person speaks at a time, no personal attacks or blaming, avoid side conversation, keep solution focused). The family consultant should start the meeting by commenting on the student's positive qualities and signs of growth, providing specific examples of each quality, and asking others to provide input. Throughout the meeting, consultants are trained to use group facilitation skills to reflect comments and listen for

potential barriers to motivation and implementation. If at any time during the meeting a participant is verbally attacked or put in the "hot seat" by others, the family consultants intervene immediately to defuse the tension and redirect the focus to the agenda and goals, steering the conversation back to the goal and solution needed, rather than toward the past or toward blaming others.

As the meeting progresses, the family consultants keep the discussion focused on common interests rather than positions. Some simple rules for assuring the meeting progresses as intended include the following: (1) Deal with one issue at a time. (2) Save the most challenging issues for later in the meeting so that the group can experience success before tackling the biggest issues. (3) Continue to ensure that everyone separates the people from the problem behaviors. (4) Take time to listen and hear everyone's perspectives. (5) Develop a plan of action to succeed.

Concluding the Meeting

As the end of the meeting approaches, the family consultant announces that the meeting will be ending soon and checks if there are any issues that must be considered during the meeting that have not yet been addressed. Next, they summarize what has been accomplished and what needs to be done by whom and when. Prior to leaving the meeting, an action plan is put into writing. The family consultant reviews any items that were not addressed and creates a plan for resolving these items in the future. Finally, participants are asked for feedback on the process of the meeting, and everyone is thanked for their time and participation. Future meetings are scheduled, if needed.

After the meeting, the family consultant summarizes the discussion in a written format that includes what was accomplished and who will do what and when. This summary is distributed to members who attended the meeting, including parents. The TEAM then follows up on decisions that were made during the meeting to make sure action steps are taken; it also pursues items that were unresolved and creates an action plan for resolving them.

Case Example

Presenting Problem

Alan is a 10-year-old Mexican American male living with his biological mother, Ms. Lopez, and his 3-year-old half brother. Alan's biological parents were never married and separated soon after his birth. Alan does not have contact with his biological father. He is in fourth grade, receiving special education services for EBD. The TEAM process was initiated by request of Ms. Lopez because Alan has a history of severe behavioral difficulties at home and school that have resulted in repeated hospitalizations and suspensions from school. Specifically, Alan demonstrated verbal and physical aggression toward peers and adults, threats of harm to others, oppositional and defiant behavior, and impulsivity. Additional concerns include poor social skills and academic performance.

Family Intake and Feedback Sessions

The family consultant met with Ms. Lopez, conducted an intake interview, and gathered ecological assessments on the problem behavior at home and school. After the intake interview, a 90-min feedback session was conducted at the family's home. In this meeting, the major findings of the assessment were discussed, as well as implications for addressing presenting problems. Feedback on both strengths (i.e., protective factors) and areas of concern (i.e., risk factors) of the family was provided. Protective factors identified from the assessment included Ms. Lopez's strong commitment to Alan's health and well-being, use of encouragement at home, and clear communication of behavior expectations. Further, Alan maintained a positive attitude toward school, enjoyed mentoring younger peers, and continued to attend school regularly. Alan also had several teachers and staff that were highly invested in his success.

Despite these strengths, the family and school assessment revealed significant concerns in

several areas. The identified risk factors included ratings by Ms. Lopez and Alan's teacher that placed Alan in the clinical range for problems with aggression. While Alan did not demonstrate any aggressive acts at home or school during the assessment time period, it appeared that adults have developed a style of interaction with Alan that allowed him to escape challenging tasks in exchange for reduced problem behaviors. That is, when Alan was asked to complete a task perceived as difficult, he often began to escalate his behavior (e.g., refusing to do work, throwing objects) which was followed by teacher or parent removal of the task. If Alan was not allowed to avoid the task, he would become aggressive toward adults or peers in order to escape the situation or task. This resulted in reduced expectations for Alan both at home and school. In addition to aggression, Ms. Lopez and Alan's teachers reported that Alan did not appear to have coping skills to help him manage feelings of anger or frustration. The school psychologist also indicated that there were concerns regarding Alan's cognitive ability, particularly in relation to his inability to perform at grade level.

Finally, communication between home and school was strained. Ms. Lopez reported dissatisfaction with the implementation of Alan's IEP as well as poor communication from the school concerning changes to Alan's academic work and behavior chart. While they acknowledged Alan's academic concerns, school staff reported that Alan's behavioral improvement made him less of a concern in the classroom. The mother viewed the school as no longer teaching her child and minimizing interactions and expectations to avoid conflict. The school principal and teachers in turn perceived the mother as intrusive and having excessive expectations.

Action Plan

Following review of the feedback, the family consultant collaborated with Ms. Lopez to develop an action plan based on her primary concerns and accounting for areas where the family was not currently receiving services or support from other mental health providers. Ms. Lopez indicated that her primary concern for Alan was low academic performance. In relation to this concern, Ms. Lopez also stated that she believed Alan's behaviors at school stemmed from instruction and assignments that were not appropriately modified or at his grade level. Ms. Lopez indicated that her specific goal was to work with school staff to ensure Alan received instruction at the appropriate grade level for his current level of performance. To achieve this goal, Ms. Lopez identified that communication between home and school needed to improve and Alan's team, including Ms. Lopez, needed to work together to implement IEP modifications (e.g., chunking work, sending work home that is at grade level). Ms. Lopez stated that a school meeting facilitated by the family consultant would be an effective, efficient approach to address this goal. The primary aims of the meeting would be to communicate IEP modifications to teachers, emphasizing their purpose and importance, prioritize modifications, and identify who was responsible for the execution of each modification.

Ms. Lopez described this goal as very important to her family. She indicated that a school meeting would be a great opportunity to make sure that everyone was on the same page with respect to Alan's academic and behavioral needs. However, Ms. Lopez expressed concerns about past school meetings that were not effective in bringing about change for Alan. Despite these concerns, Ms. Lopez stated that she believed school staff enjoy Alan and want him to succeed. To foster success during this meeting, the family consultants worked with Ms. Lopez to prepare for the school meeting. Ms. Lopez indicated that it would be important to avoid blaming the school for Alan's difficulties and to provide a neutral perspective. Additionally, the family consultant worked with Ms. Lopez to identify a few strengths she would like to mention at the meeting about things that are going well at school and then to concisely state one of her biggest concerns regarding Alan's success at school.

School Preparation and Meetings

The family consultant gathered data from the school staff about Alan's behavior in advance of the school and family meeting. She also convened a pre-meeting with all school personnel involved with Alan. At this meeting, she shared her observations and intentionally framed the work of Alan's mother in a positive light. She highlighted the mother's hard work and intense interest in helping Alan be successful.

Within 1 month of the feedback and action-planning meeting with Ms. Lopez, the family consultant arranged a school meeting that coincided with the end of the school year. Due to the timing of this meeting, it was structured as a collaborative, transition-planning meeting to help ensure Alan's success during the following school year. Attendees included the family consultant, Ms. Lopez, the assistant principal, the special educator, and Alan's current homeroom and math teacher. The family consultant provided an agenda for the meeting. Attendees summarized Alan's strengths, discussed concerns, identified one common concern (i.e., Alan's transition to 5th grade and 5th grade teachers' implementation of his IEP), and developed a plan to address the concern. This plan included meeting shortly before the next school year, immediately beginning efforts to assist Alan with becoming familiar and comfortable with the 5th grade teachers, and Ms. Lopez developing a list of successful academic and behavioral strategies for others to implement with Alan. Ms. Lopez reported that she was pleased with the result of the school meeting and hopeful that such advanced planning would help Alan have a more successful transition at the beginning of the school year.

One week prior to the beginning of Alan's 5th grade school year, the school psychologist arranged a dual IEP and transition-planning meeting with Ms. Lopez and Alan's school team. Attendees included Ms. Lopez, the family consultant, school psychologist, assistant principal, behavior specialist, two of Alan's 4th grade teachers, two of Alan's new 5th grade teachers, and several special education staff members. Suggestions for success were shared by Alan's 4th grade teachers, Alan's new teachers asked questions and solicited suggestions for their work with Alan, Alan's IEP and goals were reviewed, and a plan was developed for Alan's school schedule.

Evidence Supporting the Practice

The SE-FCU was recently piloted with six students from two elementary schools implementing Positive Behavioral Interventions and Supports (PBIS; Reinke, 2013). Participants in this study were elementary school students that either (1) received two or more office disciplinary referrals or (2) received a referral for special education evaluation or behavioral concerns. The school personnel contacted families of students meeting the above criteria to assess their interest in participation in the study. Families that were interested in participating and who provided consent were offered the Family Check-Up. Two family consultants from the University of Missouri worked together with each family. Results indicated significant decreases in teacher-rated externalizing and self- and teacher-rated internalizing problems on the Behavior Assessment Scale for Children (BASC-2) at a 3-month follow-up. Paired *t*-test showed statistically significant decreases in teachers' reports of externalizing behavior (t (5) = 3.11, $p < .05$, $d = 1.11$) and conduct problems (t (5) = 3.00, $p < .05$, $d = 0.77$). Additionally, teacher report of depression was significantly less at the 3-month follow-up (t (5) = 2.73, $p < .05$, $d = 0.90$). Interestingly, child report of decreased depressive symptoms was significant with a large effect size (t (5) = 2.78, $p < .05$, $d = 1.04$). There was also evidence of practical significance as several students moved from the clinical to the nonclinical range of symptoms. Findings indicate promise for use of the SE-FCU for elementary students with disruptive behavior problems. Key to effective implementation of the intervention were family consultants who were effective liaisons, building positive relationships with the families and school-based personnel, supporting effective communication between

families and schools, building effective function-based behavior supports that crossed both school and family settings, and maintaining that the overarching goal was to produce positive outcomes for the students.

In addition, the TEAM strategies for planning behavior support plans were piloted with a single student receiving services in special education for EBD (Adamson & Mitchell, 2011). In this example, the school had identified a 5th grade student as having severe behavior problems across school and home settings that were unresponsive to intervention. Family consultants from the University of Missouri worked with the school-based team, including the child's parent to determine the problem behaviors were escape maintained.

To support the development of the BSP for the school, the family consultants worked with the school-based team on a menu of options of strategies that could be implemented in the school setting to support the student. The options included setting event strategies, antecedent strategies, behavior instruction strategies, and consequence strategies with five or more options for each. Each of the strategies would effectively support the student in decreasing her escape-maintained behavior and increasing her success at school. From this menu of strategies, the school-based TEAM was encouraged to select at least one strategy from each (i.e., one setting event strategy, one antecedent strategy, etc.) that they could implement in the school setting. The result was the development of a feasible relevant behavior support plan in which team members agreed upon.

The main advantage to this approach was increased buy-in by school team members and the parent. Past experience in developing an effective intervention plan had been unsuccessful due to conflict among what the school was able and willing to do and what the parent felt the school should be doing to support this student. By bringing the two parties together, reviewing all the data and information in context, and incorporating information about the student needs, staff skills and resources, and parent values and needs, a mutually agreed-upon behavior support plan was developed. Classroom observations revealed changes in teacher behavior including an increase in positive feedback, decreases in both negative and corrective feedback, and an increase in student academic engagement, which was associated with collateral decreases in off-task and disruptive behaviors. The parent reported a more positive relationship with the school and felt that the plan was successful.

Implications and Importance of the TEAM Model

Increasing parent involvement is a priority for most schools, and yet challenges remain in being able to engage all families in their child's education and in school-based services. Growing evidence suggests that strategies to promote parent involvement need to be flexible and adaptive if they are to be widely disseminated by schools with varying resources and from different contexts. Additionally, supports are needed to ensure the strategies can be implemented with high fidelity by school personnel who have moderate levels of training and expertise (Glasgow et al., 2004). The TEAM model relies on existing personnel and structures within schools to deliver high-quality services to families of students with EBDs. By addressing motivational barriers at the school and family levels, the strategies in the TEAM approach make it more likely that school-based teams will maximize their impact.

Students with EBDs can be challenging for schools and families. Joining families and schools toward developing and implementing effective supports for these students will likely produce optimal outcomes. Training school personnel in evidence-based family engagement and interventions to support students with emotional and behavior problems will increase parent engagement in the process.

This chapter described a model for developing school-based teams that actively involve parents, use motivational interviewing strategies, and develop effective behavior support plans that cross the home and school environments. Finding ways for schools and families to work together at a broader level than currently exists may prevent the negative trajectories of children with challenging

behaviors by improving school success, increasing homeschool communication, and supporting effective parenting practices. Although the focus of the chapter was in describing strategies for working with families at high risk for disengagement in school services, it should be noted that the approach is relevant for working with all families in school settings. Indeed, if school personnel interacted with families using these strategies in all contacts (e.g., parent-teacher conferences, phone calls), they may be able to prevent many families from disengaging from school-based services in the first place.

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Lessons Learned from Scaling Up the Ecological Approach to Family Interventions and Treatment Program in Middle Schools

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Introduction

Student problem behavior at school is challenging for school staff (Walker, Colvin, & Ramsey, 1995) and a costly problem for communities and society (Miller, 2004). Youth who engage in problem behavior at school often have a variety of related concerns, including low achievement, low school attendance, depression, and substance use (Patterson, Reid, & Dishion, 1992). Moreover, school transitions may create openings for disruptions to family management and for entry into new peer groups that could promote problem behavior (Dishion, Ha, & Véronneau, 2012). The middle school years offer a window of opportunity for prevention and early intervention in the developmental progression of problem behavior and substance-use initiation and escalation (Dishion & Patterson, 2006). Unfortunately, most middle schools lack adequate programming and infrastructure to effectively support those youth who are at risk for academic, behavioral, or emotional problems (Eccles et al., 1993; Gottfredson et al., 2000).

The Ecological Approach to Family Intervention and Treatment (EcoFIT; Dishion & Stormshak, 2007) was designed as a flexible strategy to intervene with families during periods of developmental transition or risk. One important adaptation of this model has been its integration into public middle schools as a way to help schools, districts, and families work collaboratively to address student problem behavior and facilitate student progression along a more positive educational trajectory. The EcoFIT model focuses predominantly on fostering effective family management practices, which have been shown to effect long-term change (Dishion & Kavanagh, 2003). Consistent with a public health prevention model (O'Connell, Boat, & Warner, 2009), the school-based application of EcoFIT integrates well into a three-tier approach, with universal, selected, and indicated interventions offering an optimal balance of efficiency of implementation and public health impact.

Progress in the development of the EcoFIT model has reached a critical point. It is now necessary to test the extent to which the model can be implemented successfully by school staff themselves and to gather the "practice-based evidence" that will help inform future revisions and adaptations (Green & Glasgow, 2006). In this chapter, we share some of the lessons we have learned in our

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efforts to scale up and evaluate the effectiveness of the EcoFIT program in middle schools. We present these lessons within the Practical, Robust Implementation and Sustainability Model framework (PRISM; Feldstein & Glasgow, 2008).

Scale-Up Evaluation Framework

The ultimate goal of our scale-up project is to evaluate the public health impact of broad implementation of the EcoFIT model in middle schools. Unfortunately, to have an impact at the macro level, it is not enough to design an intervention that is highly efficacious at the school level. Other considerations that temper an intervention's impact include the representativeness and proportion of the targeted population that receives the intervention and the degree to which eligible agencies initiate the program, implement it with fidelity, and maintain it over time (Glasgow, 2002). Thus, to evaluate an intervention's full impact, researchers and practitioners must consider multiple domains of program implementation. We selected PRISM (Feldstein & Glasgow, 2008) as a pragmatic framework with which to evaluate core implementation elements of our EcoFIT scale-up and to describe the lessons we learned as we adapted our model for effective implementation in a statewide effectiveness trial.

With regard to the PRISM framework, we have organized our discussion into four contextual factors that are important for implementation success: (a) the EcoFIT intervention itself, such as the demands it places on an adopting organization and the degree to which it is tailored to the targeted population; (b) the external environment, which includes the policies, community resources, economic conditions, and related variables; (c) the implementation and sustainability infrastructure embodied by the team members who support maintenance and provide support to implementers; and (d) the recipients—the school staff who provide services and those who receive services. Each factor affects program performance and the positive public health impact of the intervention.

Overview: EcoFIT in Public Middle Schools

Comprehensive descriptions of the EcoFIT model (Dishion & Stormshak, 2007) and its adaptation to middle school contexts (Dishion & Kavanagh, 2003) are available elsewhere. Here we briefly summarize the EcoFIT model, beginning with a historical overview describing how it emerged from developmental and family management and training models developed at the Oregon Social Learning Center (Dishion, Reid, & Patterson, 1988; Patterson et al., 1992).

History of the EcoFIT Program

The EcoFIT model evolved from the Adolescent Transitions Program (ATP) as a tiered intervention delivery system in which the Family Check-Up, an intensive family-centered assessment and intervention, is delivered to at-risk middle school students. This model originated when ATP was introduced in the mid-1980s as an intervention for youth at high risk for behavior and substance-use problems (Dishion et al., 1988). Based on developmental models that emphasized the central role of family management and peer influences in preventing or promoting escalating problem behaviors during adolescence (Dishion & Loeber, 1985; Patterson & Dishion, 1985), the ATP included two complementary curricula: (a) a teen group intervention that focused on self-regulation skills and (b) a parenting group intervention that emphasized family management skills. Evaluation of this program revealed that the peer group intervention produced iatrogenic effects, despite the effectiveness of the parenting intervention (Dishion & Andrews, 1995; Dishion, McCord, & Poulin, 1999; Poulin, Dishion, & Burraston, 2001). This led to a narrower focus on family management to reduce problem behavior. ATP efficacy findings (e.g., Irvine, Biglan, Smolkowski, Metzler, & Ary, 1999) prompted recognition of its evidence base by the National Center for Substance Abuse Prevention, the National Institute on Drug Abuse, and others.

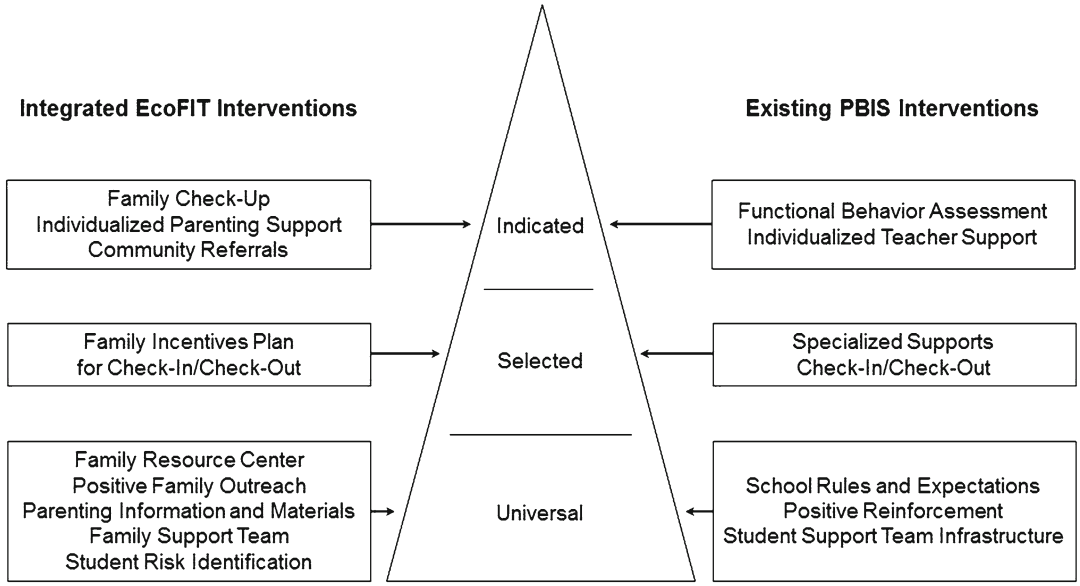

Fig. 1 Concatenation of school and family Positive Behavioral Interventions and Supports (PBIS)

Attention then shifted to enhancing the intervention's reach and engagement of at-risk families. In particular, the model was adapted for integration into middle schools and used (a) a tiered approach of identification, (b) graded levels of intervention intensity, (c) motivation-enhancing strategies (Miller & Rollnick, 2002), and (d) a tailored and adaptive intervention design (Collins, Murphy, & Bierman, 2004). The standardized ATP 12-session parenting group format was transformed into an assessment-driven program streamlined to focus on specific areas of family or student need, with flexibility in number of sessions, intervention location (school or home), and format (individual or group) to best fit the families, schools, and communities it served.

Description of the Current EcoFIT Model in Public Middle Schools

The three-tier intervention design is key for wide dissemination of parenting support. The program is tailored according to the level of risk, with graded intervention intensity to address students at the universal, selected, and indicated levels (Dishion & Kavanagh, 2003). A more complete description of the specific intervention implementation is available elsewhere (Fosco, Dishion, & Stormshak, 2012); for the purposes of this chapter, we focused on the key adaptations that have been made for broad-scale dissemination. A primary adaptation was to explicitly describe how to integrate our tiered model into existing intervention models, such as Positive Behavioral Interventions and Supports (PBIS; Sugai et al., 2000). As shown in Fig. 1, we mapped core EcoFIT components onto PBIS components to delineate the complementary nature of behavior-change principles in school and home contexts. We anticipated several advantages to integrating EcoFIT into existing PBIS frameworks. First, PBIS schools must have a clearly defined behavior management infrastructure with administrator support, identified staff, and active student support teams. Second, PBIS schools have already adopted a system of positive reinforcement that we could connect to our strengths-based approach. Third, we were able to build on existing student behavior screening and school-based interventions to integrate family-centered interventions.

Universal Level

This level consists of three core intervention elements. First, each school establishes a family resource center (FRC) as a base of operations from which trained school personnel can disseminate evidence-based parenting information (e.g., brochures, books, worksheets, videos) and be available to offer basic informational and consultation services to all families of children at the school (e.g., assistance with accessing online grades, connecting with teachers). A second intervention goal is to promote family–school partnership through parent outreach activities, parenting topic nights, family activities at the school, and positive family contacts about student successes (Fosco et al., 2012). The third core element is a schoolwide multiple-gating system to facilitate early detection of problems and efficient referral to more intensive support as needed (Dishion & Patterson, 1993; Loeber, Dishion, & Patterson, 1984). This is accomplished throughout the year with parent school-readiness screening surveys, teacher behavioral screening surveys, and attendance and disciplinary referral data monitoring.

Selected Level

At this level of intervention, schools are trained to use an enhanced version of the PBIS Check-In/Check-Out system (Crone, Hawken, & Horner, 2010) with identified at-risk students, which includes a family incentives component to promote student behavioral change at school. Traditionally, this system enlists students and teachers to track standardized behavioral goals throughout the day, allowing students to check out with their behavioral tracking sheets and receive rewards for meeting goals. EcoFIT capitalizes on this opportunity to explicitly define parental involvement in supporting positive behavioral change and to integrate parents into the early stages of school-based behavioral concerns. Additional supports include home–school family management worksheets to foster effective structuring and supervision of homework and attendance.

Indicated Level

Interventions at this level offer more intensive support for high-risk students or those for whom selected-level supports were unsuccessful (Crone & Horner, 2003). Parents are involved as collaborators in the decision to proceed to indicated-level interventions, either through a joint decision that selected-level interventions have not sufficed or by drawing on parents' and school staff members' concerns about the severity of problem behavior. The core EcoFIT intervention at the indicated level is the Family Check-Up (FCU) assessment and intervention (Dishion & Kavanagh, 2003; Dishion & Stormshak, 2007), which we modified to include two brief, family-centered sessions to motivate parents to change parenting practices and use intervention services addressing their specific needs. The FCU draws on motivational interviewing principles (Miller & Rollnick, 2002) to help parents effectively implement family management strategies to address student behavioral concerns. At the first session, the parent consultant interviews parents about their goals, concerns, and motivation for change. Then, parents complete a survey to identify the ecological, family, and youth dimensions that underlie student risk or resilience in the school setting. Based on this information, parent consultants give strengths-based feedback, describing the assessment results in a way that supports parent motivation to change and that helps identify appropriate evidence-based intervention options (e.g., school-based supports for the student, family support programs focusing on parenting skills, community referrals). Families select only those program components that they are motivated to engage in, an approach that is consistent with a motivational interviewing perspective (Dishion & Kavanagh, 2003). Families can elect to receive more intensive family support derived from the ATP (Dishion & Patterson, 1996; Dishion et al., 1988). In the EcoFIT effectiveness implementation trial described here, three key domains were developed for use in schools: positive reinforcement of appropriate behavior, parental monitoring, and limit setting, also described in the *Everyday Parenting Curriculum* (Dishion, Stormshak, & Kavanagh, 2011).

Efficacy Research on EcoFIT

The middle school adaptation of the EcoFIT model was evaluated in the Project Alliance 1 and Project Alliance 2 randomized controlled trials. Both trials were conducted in metropolitan schools serving multiethnic students. Randomization occurred at the student level, and students and families received access to either the EcoFIT model or to school as usual. Parent consultants were hired, trained, and received ongoing supervision by EcoFIT developers (Dishion & Kavanagh, 2003) to support intervention implementation fidelity.

Project Alliance 1 included a sample of 998 sixth grade students who were followed longitudinally. The strategy involved using brief teacher screeners of student behavioral risk indicators to engage at-risk and high-risk students in more intensive family support services. Accordingly, although families at all levels of risk participated in the FCU, students involved in deviant peer groups, those from single-parent families, and those with the highest teacher-reported risk were most likely to engage in the FCU intervention (Dishion, Kavanagh, Schneiger, Nelson, & Kaufman, 2002). Intervention services were relatively brief. High-risk families averaged about 6 h of parent consultant contact over 2 years; moderate- to low-risk families averaged about 3.5 h and less than 1 h of contact, respectively. Family consultant contact ranged from telephone calls and personal communication to FCUs (Dishion et al., 2002).

The Project Alliance 2 randomized trial evaluated multicultural competence of the EcoFIT intervention and sought to increase family engagement rates in a sample of 593 sixth grade students by involving families at all levels of risk. Outreach efforts that extended beyond the highest risk students resulted in FCU participation by 42 % of the intervention group families. Ethnic diversity among family consultants facilitated culturally sensitive program services, and FCU assessments were expanded to address discrimination, youth ethnic identity, and acculturation. Because we involved more families than would typically be included at higher tiers, we were able to conduct group comparisons and learn that the EcoFIT model is equally efficacious across racial groups (Stormshak et al., 2011).

Converging evidence across these trials indicates that the EcoFIT approach helps prevent the escalation of problem behaviors, including antisocial behavior (Connell, Dishion, Yasui, & Kavanagh, 2007), risk for arrest (Connell, Dishion, & Klostermann, 2012), substance use (Connell et al., 2007; Dishion et al., 2002; Stormshak et al., 2011), affiliation with deviant peers (Stormshak et al.; Van Ryzin, Stormshak, & Dishion, 2012), and engaging in risky sexual behavior (Caruthers, Van Ryzin, & Dishion, in press). Additional benefits include decreased risk for youth depressive symptoms (Connell & Dishion, 2008) and protection against declines in student grade point averages and school attendance (Stormshak, Connell, & Dishion, 2009). In sum, EcoFIT has robust implications for preventing growth of a range of youth risk factors.

Preparation for Effectiveness and Dissemination Research

The first step toward EcoFIT effectiveness and dissemination research was the Next Generation trial, which randomly assigned schools either to school as usual or to an intervention that included parent groups with a school-based FRC. The program improved parent involvement in schools (Stormshak, Dishion, Light, & Yasui, 2005). Although allocation of family consultants' time was determined by school administrators, family consultant salaries were paid by research grants. Thus, this project did not test implementation feasibility within the financial and the time constraints of public middle schools. To pilot integration of the EcoFIT model into a PBIS school, we established a model middle school in which school resources were allocated to create and maintain an FRC and to implement the program. We also surveyed 16 middle schools, including 127 school staff, and found that EcoFIT family-centered services would be of

considerable value and were underrepresented in most middle schools. These studies set the stage for our current project.

Scaling Up the EcoFIT Model: Reflecting on the PRISM Context Domains

Our study is testing the effectiveness of EcoFIT in 41 Oregon middle schools; 21 are randomly assigned to receive training for the EcoFIT intervention immediately and 20 are assigned to receive the program after a 3-year delay. We initially recruited only middle schools that had implemented PBIS, because the EcoFIT approach was designed to fit the three-tier model; however, as described later in this chapter, our experiences with schools led us to believe that this program also fits in schools that have not formally implemented a three-tier model such as PBIS. The trial evaluates the effectiveness of EcoFIT for improving student academic outcomes and social behavior and for enhancing family–school collaboration through the implementation of family support services by school personnel.

EcoFIT: Organizational Perspective

The PRISM framework raises questions about organizational readiness to implement interventions, the usability and adaptability of interventions to organizational conditions, and the burden an intervention places on an organization. Questions from the organizational perspective and lessons learned are presented in the following paragraphs.

Are Key Staff Ready to Conduct the Intervention?

Staff readiness has been affected by education budget cuts that have significantly reduced school staffing and resources, especially those aimed at family outreach that would most likely be involved in EcoFIT delivery. Many schools are short staffed and struggling to redefine roles. Principals required to cut the number of teachers or other key staff members have found it politically difficult to adopt and prioritize a parent-focused intervention that may be viewed by school boards and the public as less important. Staffing shortages and low morale present substantial barriers to school readiness to implement the EcoFIT program.

To prepare staff to conduct the EcoFIT intervention, we focused on motivation and adaptation. Because organizational change requires staff motivation (Fixsen, Blase, & Van Dyke, 2011), we conducted workshops with all school staff in the spring prior to implementation. Our goals were to provide information about the EcoFIT model, to assess school staff needs, and to identify areas of family support the staff were particularly motivated to engage in. When we were able to connect aspects of the intervention model to the outcomes of greatest interest to school staff, we saw more rapid implementation; however, this required adaptation of the intervention model. It was necessary to streamline the program and greatly reduce staff time. Also, to decrease reliance on school counselors or school psychologists who rarely had time to conduct the intervention, we shifted program delivery from a single family resource specialist to a range of school staff, including school administrators, instructional and educational assistants, school receptionists, and teachers.

Is the Program Complex and Burdensome?

In the shift from efficacy to effectiveness models, this aspect is particularly important because of the dearth of closely supervised, extensively trained family consultants in schools. School staff who serve as family consultants typically are not trained to deliver intervention support services to families. Thus, to promote large-scale implementation, the original intervention had to be made less burdensome. Modifications included (a) revising and condensing assessments (e.g., shortening surveys, eliminating video observations), (b) trimming program content to essential components and adapting it to a level appropriate for most school staff, (c) revising and organizing intervention materials for ease of use, and (d) designing a training program to identify, mobilize, and teach key school staff to implement the EcoFIT model.

Despite these adaptations, we learned quickly that even small issues of convenience could make the difference in whether materials were used regularly or forgotten completely. School staff have busy and fluctuating schedules. We found that collaborating with them to set up the FRC with ready-made packets of materials helped ensure that all interview and assessment materials were organized in one place whenever drop-in families wanted an FCU session.

Another beneficial change was to roll out the program gradually. We started with a brief workshop that was tailored to each school, delivered targeted training to identified school staff, and mobilized interest and awareness among all staff. We helped school staff establish universal-level supports first, followed by selected and indicated interventions. The intervention was seen as less burdensome when staff members were not faced with all three levels at once.

Can Decision Support Be Embedded in Work Flow?

To fit each school's individual leadership structure, culture, and work flow, the intervention was specifically designed to be embedded in existing family support service systems. Project staff held regular meetings with school program staff and student support teams to ensure smooth implementation among the staff members who implemented aspects of the intervention, which could include teachers, school counselors, principals or vice principals, educational assistants, coaches, and willing parents (for appropriate tasks, such as universal-level family outreach).

We found that the success of EcoFIT implementation depended on thoroughly understanding executive decision-making procedures in each school and on facilitating delegation of decision-making powers when needed. Implementation was most efficient when interventionists were given decision-making autonomy by school leadership and when school leadership supported the interventionists' work. In larger schools where leadership was organized by grade-level teams, it was helpful to promote communication across teams to pool resources and implement family-level supports. For example, if a sixth grade teacher were overseeing selected-level supports in a school, communication was necessary to encourage continuity of support for seventh and eighth grade students. We encouraged an atmosphere of teamwork and collaboration by facilitating regular meetings, which could be integrated into existing meetings to limit burden.

EcoFIT: Family Perspective

This PRISM domain addresses the extent to which the intervention is participant centered, the degree to which the program offers choices and addresses barriers, and the participant burden. Key questions and lessons learned from the family perspective are presented in the following paragraphs.

Is the Program Family- or Person-Centered?

Successful implementation of EcoFIT requires a family- and student-centered perspective. Program components promote effective parenting strategies to improve child emotional, behavioral, and academic functioning. EcoFIT can be adapted to any family constellation, and the choice of intervention components and modalities and delivery within an ecological framework make it tailored to the unique needs of each family.

School staff consistently excelled at being student centered but varied in the degree to which they viewed the family as central to student problem behavior at school. As a result, we found that efforts to create structural changes to proactively engage and involve parents in school-based interventions for students sometimes required a substantial paradigm shift. Moreover, the EcoFIT approach to involve families in the initial stages of intervention often ran counter to staff predispositions to try to resolve problems before contacting parents. To increase school staff comfort with and frequency of contact with families, we helped create structures to engage families from a positive frame. For instance, we encouraged school staff to initiate early, positive contacts with the home and to give positive feedback to students demonstrating progress in any domain rather than focus on deficits. We worked with school leadership to model these approaches with

their staff and to create a strengths-focused environment. In addition to providing workshops about the benefits of engaging families, some schools created a system in which teachers submitted family-contact slips in a drawing to win a $5 coffee gift card to encourage positive family contact by positive means.

Does the Family or Student Understand When They Have Done Well?

At every level, EcoFIT is designed to provide feedback on improvements in student behavior. At the universal level, families receive positive contacts at the beginning of the year. Selected interventions give feedback on how students are meeting their behavioral goals. Indicated FCUs provide family assessments and strengths-based feedback, which is central to the philosophy of reducing family resistance and motivating change. The indicated-level intervention also incorporates progress checks and tracks and rewards completed tasks.

Our collaboration with school staff offered a refreshing reminder that most had become involved in education because of a genuine concern for students. EcoFIT's strengths-based perspective was embraced by school staff who appreciated opportunities for acknowledging student efforts or sending positive feedback home. We learned the value of developing easily sustained approaches and gaining early momentum. For example, we helped schools develop simple postcards for sending positive feedback to all families within the first month of school. Schools that sent positive feedback reported improved rapport with parents, received messages of gratitude, and had less difficulty later in reaching parents by phone or email.

External Environment

The PRISM external environment domain includes market forces and conditions, prevailing regulations and policies, and community resources that affect the degree to which an intervention will be supported. Of particular importance to our project was the national economic downturn that began in 2008, which caused serious budget cuts in Oregon schools and resulted in staffing and resource losses that led many schools to decline participation in our study. Among participating schools, principals faced political challenges in asking remaining staff to adopt a new program in the context of reorganization, increased burden, and job insecurity.

The EcoFIT model is designed to be linked with community resources at universal and indicated levels. At the universal level, we encourage schools to increase parent awareness of available community programs, such as scouting groups, recreation and sports leagues, community library programs, and community events. Resource information might include details about community medical or dental services, food pantries, and low-cost legal services. Some schools in hard-hit communities pooled resources to provide basic items for students in need, including notebooks, pencils, shoes, and winter coats, which were kept in the FRC. At the indicated level, the FCU feedback session often includes referrals to community organizations for families in need (e.g., alcohol or drug treatment for parents). In the face of community programming cutbacks, some families turned to schools as a primary source of support.

In our efforts to scale up the EcoFIT model in schools, two issues quickly became evident. First, we learned that school staff commonly did not know about available community resources to which students could be referred. Our team collected ideas from staff, researched community resources, and located existing resource lists created by local agencies so each school could have a resource list in their FRC. Second, we learned that community resources are quickly disappearing, especially in more remote areas, and that in many situations schools are asked to assume the burden, with or without adequate support. For school staff without training or experience with these issues, our team provided practical advice about how to respond within the limitations of their circumstances. We were routinely impressed by the willingness and passion of school staff to find ways to gather whatever resources could be found to help students' families.

Implementation and Sustainability Infrastructure

This PRISM domain addresses the existence of a dedicated implementation and sustainability team, support for implementers and adopters, and implementation and sustainability plans. Questions about infrastructure, and lessons learned, are presented in the following paragraphs.

Is There an Existing Infrastructure That Can Take on Key Implementation and Sustainability Tasks?

EcoFIT was adapted for schools with established PBIS infrastructure so that it would be seen as value added rather than a new program (Dishion, 2011). However, the level of PBIS implementation across schools varied, as shown by the School-Wide Evaluation Tool (Sugai, Lewis-Palmer, Todd, & Horner, 2001). There was also substantial heterogeneity across schools in terms of leadership structure and involvement in student interventions.

Contrary to expectations, in several instances high fidelity of PBIS programming implementation proved a barrier to successful implementation of EcoFIT. In some schools, having a well-defined PBIS infrastructure seemed to narrow the focus of student support interventions to school-based interventions, which caused the potential benefit of parent involvement to be overlooked. Schools with less-established PBIS were often more open to guidance in supporting at-risk students and were even actively seeking it. For high-fidelity PBIS schools, we emphasized that an effective family–school partnership could reduce staff burden of responsibility for managing student behavior with families because responsibility would be shared.

Can Implementation and Sustainability Tasks Be Part of Key Staff Job Descriptions?

In theory, EcoFIT would be implemented and sustained by school staff already providing behavior-intervention services. In practice, we found wide variations in staff provision of these services across schools and shortages of school counselors and school psychologists.

In the context of reduced staff and increased workloads, it was often impossible for school administrators to allocate significant time for one person to implement the EcoFIT model. Often, several staff people would contribute. In these cases, we learned it was critical to avoid ambiguity in staff roles in EcoFIT delivery. Wherever possible, we integrated EcoFIT intervention components into existing student behavioral interventions (e.g., PBIS). For example, we folded our selected-level Home Incentives Plan into ongoing systems, such as Check-In/Check-Out, which promoted efficiency and ensured clear task assignments and follow-through. When this was not possible, we worked to clearly define staff responsibilities and tasks.

Can a "Bridge" Researcher Facilitate Implementation?

Our function as bridge researchers, those who provide technical support during the initial implementation of EcoFIT, is at the heart of the EcoFIT implementation approach. After initial trainings with schools, our implementation staff maintains an ongoing collaborative presence. We view the bridge researcher role as essential to facilitating real-world implementation with fidelity. Bridge researchers offer intermediary guidance between initial planning and training and subsequent effective implementation. While implementing EcoFIT, we found many points of confusion about the program that could have resulted in less-efficient or less-effective use of intervention materials. Regular communication ensures that staff efforts to implement EcoFIT components yield maximum benefits. Our three goals as bridge researchers are to (a) help identify ways that EcoFIT can address desired aspects of school change; (b) support efficiency, feasibility, and sustainability during planning sessions; and (c) facilitate support and communication among school staff.

The relationship bridge researchers formed with school staff was of utmost importance. Ties were strengthened by attending important meetings, understanding the school infrastructure and climate, and attending school events. This relationship set the foundation for implementation. At meetings, bridge researchers could advocate

for family supports. Other times, the mere presence of our team was a reminder of the new resources available in the school during the early stages of implementation and helped embed EcoFIT into school infrastructure. Our implementation team members found it helpful to steer school staff discussions toward feasible, sustainable practice. When concerns were raised about staff resources, we brainstormed ideas for including parents to make student behavior-change efforts more efficient. Collaborative problem solving with schools was essential for program adoption; we found that being too ambitious in promoting change could lead to discouragement and abandoned effort. We also worked hard to promote continuous communication among school staff, especially through periods of change in school leadership, staff policy, and finances when critical program adaptations had to be made.

Recipients: School Characteristics

Key PRISM questions in this area involve program support from the school and staff. Questions and lessons learned from the school perspective are explored in the following paragraphs.

Has the Program Received Support from Key Staff?

Support from principals, assistant principals, and school leadership is critical for successful implementation of a program such as EcoFIT. In our implementation approach, we always tried to include principals in the trainings, but, in the face of substantial school budget cuts, principals' time constraints impeded their ability to attend trainings. For example, the responsibilities of key administrators were commonly divided across two schools or split between district administrative positions.

We learned that having principals attend initial and ongoing EcoFIT trainings was important. When principals could attend, even for a limited time, they were better able to see the potential benefits of the school–family partnership and how to integrate EcoFIT into existing infrastructure. Many principals expressed enthusiasm that EcoFIT would address deficits in family support services that they were eager to remedy. If principals were not involved in trainings, we often lost an important potential champion. In these situations, individual meetings with principals and key family support leadership were arranged to provide an overview of the program and increase motivation and enthusiasm. Without such leadership, it was difficult to maintain fidelity long enough to fully adopt the intervention (Handler et al., 2007; McDougal, Clonan, & Martens, 2000).

Are Systems Available to Support Data Gathering?

The EcoFIT model requires systematic data collection for the identification of students at risk and the assessment and monitoring of students at higher levels of intervention delivery. Many schools implementing PBIS used schoolwide data-monitoring systems to track office disciplinary referrals or other student behavioral difficulties in order to systematically identify students at risk and offer support. However, the implementation of EcoFIT requires engaging families in the identification of student risk. In this model, we encourage schools to implement a "school-readiness" screening survey in which parents report on 10 items assessing academic, behavioral, and emotional indicators of risk (e.g., following classroom rules, getting easily distracted, completing homework and assignments on time) at the start of the school year.

We learned that two important aspects were needed for the successful implementation of parent-report student risk screening tools. Based on previous research (Dishion & Kavanagh, 2003), we anticipated that parents might be offended when approached by schools after teachers identified their youth as "at risk" and therefore may be reluctant to engage in school-based services. Prior studies on multiple-gating strategies indicate that parent screening tools are as effective for predicting problem behavior as teacher reports at this age (Dishion & Patterson, 1993; Loeber et al., 1984). Thus, we adapted the survey and framed it as a school-readiness assessment for parents to alert school staff to concerns about their child that might require support. Parents can indicate levels

of risk with check boxes, making it easy for school staff to sort surveys into groups. The survey also includes a section for parents to provide contact information—which often changes, especially in economically depressed communities—thus enhancing quick follow-up with families requiring support.

We also learned the importance of having our implementation staff show school staff how to organize screening information efficiently by sorting surveys into stacks for low-, moderate-, and high-risk students. In one case, a dedicated school staff member meticulously scored and entered risk data for each student in the school, a task that took about 10 h. We have since doubled our efforts to ensure that we partner with school staff so that the most time-effective strategies for data collection, analysis, and decision making are used.

Will Staffing Levels and Training Allow for Use of Existing Staff?

In our efficacy studies, we trained family consultants in the EcoFIT model who were already experienced or trained in social service delivery. This approach was effective for ensuring high levels of clinical skill, but it is inconsistent with staffing availability in schools for delivery of the EcoFIT intervention.

In the current climate, it is unrealistic to assume that school staff have been trained in family-centered intervention delivery. Thus, it was necessary to help school staff become more comfortable with discussing sensitive family issues. Also, we restricted the program to parent interventions and support strategies that were concrete, behavioral, and positive in nature. This ensured that school staff had a base of expertise in the program components needed for student success. Wherever possible, we reframed, rather than dropped, key pieces of the original intervention to focus on the academic context. For example, we modified recommendations for instituting morning or evening routines and tracking behavior for rewards. The adapted version focused on getting ready for school on time and incentivizing this behavior. We found that by contextualizing parenting skills within school-relevant tasks, school staff recognized expertise they already had and understood the relevance of family support to school success.

How Does the Leadership Structure in Schools Affect Implementation and Sustainability?

School leadership plays a critical role in the initiation and maintenance of EcoFIT services in schools. Not only are principal's endorsement and enthusiasm critical, but the structure and hierarchy of leadership in schools also affects our ability to effectively partner with schools and embed EcoFIT programming within existing structures.

We found it helpful to assess the leadership style of principals in terms of their level of program management and the decision-making authority they entrusted to staff. In some schools, principals preferred to be a gatekeeper; in others, principals delegated EcoFIT implementation responsibility to others. Because these structural differences were rarely stated, careful assessment was critical. We sought to work within a principal's leadership style. In some schools, principals preferred to be involved in all decision making, while in other schools, principals preferred to delegate decision making about family supports to specific staff. Gaining a clear understanding of each principal's preferences enabled us to avoid dangerous assumptions that would result in either excluding principals who preferred involvement, which could jeopardize later access to school staff and a principal's enthusiasm for the intervention, or working through principals who had delegated responsibility, which could delay connections with the staff responsible for implementing EcoFIT and stall progress.

Does the School Have Family Support Efforts in Place?

Although most middle schools have existing family support systems, attempts to integrate the EcoFIT intervention into this programming involve benefits as well as costs. A trained and motivated staff could be effective in implementing EcoFIT, but existing staff and program time constraints and goals also could conflict with EcoFIT implementation.

We learned two critical lessons while working with previously identified family support staff. First, it was important to tailor the implementation of EcoFIT to match the objectives of the staff and school philosophy. Each school had unique needs, depending on their student body. As a result, some schools had designated family support staff to improve outreach to families with specific risk characteristics, such as poverty, homelessness, truancy, or ethnic minority status that led them to obtain grant funding for support liaisons (e.g., homeless family liaison, Spanish family liaison) to promote better school engagement. These staff often had strong connections with at-risk families, but sometimes underutilized our intervention components when they did not recognize the relevance for the unique needs of their targeted populations. When we effectively tailored EcoFIT family support services to their targeted populations (e.g., by translating materials into Spanish), implementation was more successful.

The second lesson we learned was to avoid placing all family support responsibilities on these individuals. Although several schools had preexisting family outreach staff, they often had clearly defined target populations and were unable to branch out. As such, we worked to help other staff team up with preexisting family support staff to ensure that the EcoFIT program was available to the entire student body.

Recipients: Family Characteristics

Key PRISM questions in this section address the characteristics of students and parents. Questions and lessons learned from the family perspective are presented in the following paragraphs.

What Are the Needs of the Student Body of a School?

EcoFIT is designed to meet the needs of diverse families that comprise a student body. Therefore, to have referrals ready for families at the EcoFIT universal level of intervention, it is important to assess socioeconomic status, neighborhood risk, home access to computers and the Internet, parent literacy and English-language proficiency, and available community resources. While training school staff to implement EcoFIT, we helped create a family support environment that reflected the diversity of the student body. On a basic level, we encouraged school staff to decorate their FRC in a manner that celebrates the cultural and demographic diversity of the student body. This philosophy carried over to all levels of the EcoFIT intervention model.

We worked hard to partner with schools to optimize connections with families in their community. We also quickly acknowledged that many answers for each school were found within the collective creativity and ingenuity of its staff. Often, our role was to facilitate brainstorming sessions to generate ideas for ways to connect with families. In communities with less parent literacy, we encouraged using media other than newsletters to communicate about school events and family resources. Automated dialer technology could be used to send a spoken message to all families or to targeted groups (e.g., Spanish-speaking households). Although the Internet has become a standard way for schools to communicate, paradoxically this method can result in a failure to connect with families most in need of information or resources. To address this problem, we worked with schools to provide computer and Internet access to families in the FRC. Sometimes, this meant opening up sections of computer labs or libraries to parents so that they could read email or check student grades online. At more intense levels of family support, we provided videos to teach core parenting skills, which helped overcome literacy barriers.

What Are Parent Perceptions of the School?

Parents' perceptions of schools can create significant barriers to engagement in the EcoFIT intervention. Parents who receive negative feedback from schools may believe that the school views their child negatively. Parents who had negative experiences as students may hesitate to visit the principal's office to discuss student behavior issues. Finally, cultural barriers may exist. Ethnic minority families may be less likely to seek

services if they have experienced service non-availability, especially if there are also English-language barriers (Griner & Smith, 2006).

These often-overlooked barriers to family engagement were targeted through universal-level efforts at positive family outreach and family-centered events at the start of the school year, such as ice cream socials and barbeques. We also worked with schools to promote parent awareness of the FRC in strategically efficient ways. For example, we encouraged schools to include the FRC on school tours, use signs to direct families to the FRC, and offer small incentives to students if their parent signed in at the FRC. Simple rewards, such as front-of-the-line passes, were used to motivate students to remind their parents to visit the FRC. Family consultants were especially welcoming and positive when meeting parents for the first time to set a positive initial tone.

Conclusions

The PRISM framework provides a useful structure for evaluating factors that could affect the EcoFIT program's readiness for dissemination. Key lessons learned in our scale-up of the EcoFIT program in middle schools center on simplicity, flexibility, and tailoring as critical factors for successful implementation across school and family contexts. Efforts to reduce complexity and burden (e.g., response cost) were critical to promoting participation and implementation among schools, staff, parents, and students. EcoFIT implementation was enhanced when it was adapted to fit into the school's culture, work flow, and leadership structure and tailored to fit individual family needs and motivations. Acceptance was highest when school leaders facilitated a cultural shift that made EcoFIT part of their school.

To produce successful long-term, schoolwide improvements, interventions should address all or most of the PRISM outcome domains of reach, effectiveness, adoption, implementation, and maintenance (RE-AIM; Glasgow, Nelson, Strycker, & King, 2006). Program evaluations often focus only on efficacy or effectiveness without considering overall program reach and representativeness or implementation costs and staff demands. We strongly recommend that developers address reach, adoption, implementation, and maintenance issues during the development of interventions rather than at the point at which they move them from efficacy to effectiveness or effectiveness to scale-up. By taking into account contextual factors, such as those addressed by the PRISM framework, intervention developers would be better positioned to bridge the gap between research and practice.

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Part IV

Coaching and Consultation

Coaching Classroom-Based Preventive Interventions

Elise T. Pas, Catherine P. Bradshaw, and Anne H. Cash

The high prevalence of student behavioral and mental health challenges points to schools as a critical context for prevention and service delivery (Hoagwood et al., 2007). There is a growing recognition of the importance of teachers in the implementation of school-based programs that benefit the social-emotional and behavioral outcomes of students. Despite the growing evidence base for the efficacy of preventive interventions (for reviews, see Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Hoagwood & Burns, 2005; O'Connell, Boat, & Warner, 2009; Wilson & Lipsey, 2007), the implementation of these interventions is often lacking (Gottfredson, Jones, & Gore, 2002) and likely requires ongoing, interactive professional development that allows teachers to reflect on their practice and provides support to teachers for high-quality implementation (Darling-Hammond, 2009).

In this chapter, we review the literature regarding the need for school-based efforts to improve students' mental health and academic outcomes and the importance of teacher practice in supporting students' needs. We also discuss ways in which coaching can enhance the quality with which teachers implement school-based prevention programs. We summarize some of the research on the effectiveness of school-based coaching models and conclude with some recommendations related to future research on coaching.

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The Importance of Coaching Teachers in Preventive Interventions in School Mental Health

The Significance of Academic and Behavioral Concerns in Schools

There is a rising concern in the American education system regarding student behavior, social-emotional development, and academic achievement (Reinke, Stormont, Herman, Puri, & Goel, 2011). Though there are limited national studies of mental, emotional, and behavioral disorders in the United States, it is estimated that between 10 % and 20 % of youth have at least one diagnosable disorder and that as many as half of all youth will display symptoms or be diagnosed with a disorder by the age of 21 (Kessler, Berglund, Demler, Jin, & Walters, 2005; Kessler, Chia, Demler, & Walters, 2005; O'Connell et al., 2009). Aggressive and disruptive behavior in elementary school has been shown to predict subsequent academic problems, school

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disruptions, mental disorders, and substance abuse, with problems persisting into adulthood (Bradshaw, Schaeffer, Petras, & Ialongo, 2010; Kellam et al., 2008; Kessler, Berglund et al., 2005; Schaeffer et al., 2006). The prevalence of academic concerns is equally startling, with the national rates of proficiency ranging from 43 % to 47 % on math (National Center for Education Statistics, 2011a) and from 37 % to 42% on reading assessments (National Center for Education Statistics, 2011b).

In addition, epidemiological studies within the field of prevention science indicate that a number of emotional and behavioral problems have common risk factors, which suggests that universal programs implemented within an entire school or community may be the most effective way to prevent both (O'Connell et al., 2009). Disruptive behavior can derail effective academic instruction and often results in the removal of students from the classroom (e.g., as a disciplinary measure or through placement in a restrictive special education setting) (Donovan & Cross, 2002; Oliver & Reschly, 2007; Pas, Bradshaw, Hershfeldt, & Leaf, 2010). In fact, disruptive and aggressive behavior is the most common reason for office referrals and suspensions (Irvin et al., 2006; Pas, Bradshaw, & Mitchell, 2011; Walker et al., 1996). In addition, children who exhibit disruptive and aggressive behavior in elementary school are also more likely to experience conflict with teachers, which can further contribute to lower academic performance (Pianta & Stuhlman, 2004). Finally, the inability to effectively address behavior problems is among the leading reasons teachers leave the field (Ingersoll & Smith, 2003), which further hinders the ability of schools to adequately address students' needs. Teacher turnover causes a discontinuity in the adoption and implementation of effective preventive interventions, particularly those serving students at the highest risk for behavioral and mental health challenges.

Teacher Preparation for Handling Behavioral and Mental Health Concerns

A heightened focus on teacher quality and instruction is occurring in tandem with the rising concern regarding the significant portion of students displaying behavioral, mental health, and academic challenges (Darling-Hammond, 2009). Unfortunately, schools where the students are most at risk and in need often have the least qualified teachers (Lankford, Loeb, & Wyckoff, 2002) and suffer the greatest turnover (Ingersoll, 2001; Loeb, Darling-Hammond, & Luczak, 2005). This further exacerbates the ability of teachers to meet the behavioral, social, mental health, and academic needs of students.

Teachers, and particularly those who are new to the field, express a need and desire for additional training in how to address disruptive behaviors displayed by students (Baker, 2005); (Reinke et al., 2011). Teachers often cite a lack of training in classroom management during their teacher preparation coursework (Siebert, 2005). Moreover, there is limited guided practice and performance feedback provided to teachers (Oliver & Reschly, 2007). This reality poses the need for additional support during preservice teacher training and for additional professional development once teachers are in the classroom.

Although research supports the effectiveness of preventive interventions in addressing a range of behavioral and academic problems (e.g., Coie et al., 1993; Durlak et al., 2011; Greenberg, Domitrovich, & Bumbarger, 2001; Hoagwood & Burns, 2005; O'Connell et al., 2009; Weisz, Sandler, Durlak, & Anton, 2005; Wilson & Lipsey, 2007), major concerns remain regarding the quality with which teachers implement evidence-based programs (Gottfredson et al., 2002). Research has also identified limitations in teachers' fidelity to more formalized and complex interventions which impacts the possibility for replication (Darling-Hammond, 2009). For example, Baker (2005) found that teachers reported the lowest willingness to implement systematic behavioral intervention plans as compared to the easier-to-implement components of behavioral management (e.g., developing clear classroom rules). Despite this issue with implementation integrity, research also suggests that teachers report a high level of openness to engage in consultation and collaboration (Baker, 2005). If in fact teachers engage in this collaboration, the quality with which they implement classroom management and preventive interventions could be optimized.

The Role of Coaching

Coaching, or the provision of assistance to teachers to guide and develop their practices (Denton & Hasbrouck, 2009), can help to address some of the gaps in teacher preparation and the implementation of preventive interventions. When coaching teachers, the goal is typically to improve use of a targeted teacher practice, such as the implementation of a program, a particular technique, or general teaching skills. More specifically, in the classroom and school contexts, this can take the form of instructing teachers on the components of an intervention, modeling the delivery of a program or classroom management strategy, observing the teacher practicing the skills, providing constructive feedback, or assisting in problem solving around a particular student challenge (Denton & Hasbrouck, 2009; Domitrovich et al., 2008). Research has linked these and other practices with better student outcomes (Curby, Rimm-Kaufman, & Ponitz, 2009; Pianta, Belsky, Vandergrift, Houts, & Morrison, 2008).

The coaching approach allows for natural practice within the contextual setting and capitalizes on sociocultural learning theory, which asserts that learning occurs through social interaction (i.e., in the classroom) (Vygotsky, 1978). The social nature of the relationship between a coach and a teacher may create a stronger commitment by teachers to learn and use new skills than in a didactic professional development setting (Joyce & Showers, 1980). In fact, research has found that when professional development embeds collaboration with colleagues and time is spent allowing teachers to reflect on their practice as a means for improvement, it is more effective than professional development which lacks these features (Garet, Porter, Desimone, Birman, & Yoon, 2001). Therefore, by developing an ongoing relationship with teachers that is reflective and supportive, coaches can assist in the development and sustenance of skill implementation (Dunlap, Hieneman, & Knoster, 2000).

Despite the potential that coaching has to serve as a means for improving teacher practice, there are challenges in assessing the effectiveness of coaching due in part to the difficulties in defining coaching. The literature contains several studies of "coaching," "consultation," "professional development," "mentoring," and "teacher induction," which in some cases may all have a similar purpose: the improvement of teacher practice and knowledge to enhance student outcomes. The definition of each construct is not entirely clear, as each most accurately represents a cluster of approaches rather than one clearly defined intervention. More specifically, there is considerable variability in the range and intensity of these services (e.g., how often teachers receive this support), the structure of training for the service providers, how comprehensive the services are, how formalized the approach is, and the theoretical foundation for the approaches taken despite often being grouped into one category (e.g., being referred to as a "coaching" or "consultation" model). Further complicating the issue is that these different coaching, consultation, professional development, etc., approaches also differ in their focus of skills used to effect change in teacher behavior (e.g., emphasis on skill building, behavioral approach of modeling and feedback, reflective approach focusing on adequacy of communication skills) and the manner in which a coach or consultant works with teachers (e.g., using an expert versus collaborative approach).

Some recent reviews provide guidance regarding the existing coaching approaches and the differences between them (see Denton & Hasbrouck, 2009), the most comprehensive of which was conducted by the American Institutes for Research (American Institutes for Research [AIR], 2004; also see Pas & Newman, in press). AIR distinguishes between five types of coaching which are grouped specifically by how the coach operates and the skills he/she uses to effect change; they include (a) technical coaching (i.e., the coach is an expert teacher helping to improve a novice teacher's instruction), (b) collaborative problem solving (i.e., the coach facilitates the problem-solving stages to help a teacher address student concerns), (c) reflective coaching (i.e., a collaborative coach prompts reflection about teaching practices), (d) team-building coaching (i.e., reflective coaching in a group context), and (e) reform or change coaching (i.e., targeted whole school change).

Although the literature distinguishes between existing models of consultation, professional development, and coaching, examples of all three can fit these categories. Therefore, in the next section, we summarize the literature on the effectiveness of rigorously tested coaching, professional development, and consultation models. It is important to note, however, that while our emphasis is primarily on coaching approaches that aim to improve social, emotional, and behavioral outcomes, we review some rigorous studies in which the goal was to enhance teacher instructional practice and student academic outcomes, as they provide further insight into the evidence regarding the potential impacts of coaching. These findings can inform coaching for the improvement of preventive interventions, including those that target student mental health.

Examples of Coaching Approaches and Their Effectiveness

Positive Behavioral Interventions and Supports

One of the most widely used school-based prevention programs is the universal component of Positive Behavioral Interventions and Supports (PBIS, Sugai & Horner, 2006). PBIS is a non-curricular, three-tiered prevention model that aims to alter the entire school environment, including classroom and non-classroom contexts, by creating improved procedures to promote positive changes in staff and, in turn, student behavior. The goal of PBIS is to prevent disruptive behavior by following the public health model and incorporating universal, targeted, and intensive systems of positive behavior support (O'Connell et al., 2009; Walker et al., 1996).

PBIS includes a coaching model, whereby an external (e.g., personnel from a different school) or internal coach receives training by the state or local school system in the core features of PBIS and strategies for effecting change and providing support to schools implementing PBIS. These coaches are typically school psychologists, counselors, or administrators who provide technical assistance to staff members, in addition to their regular responsibilities. Specifically, PBIS coaches work collaboratively with the school's PBIS team to help facilitate the implementation of the core features of the PBIS model (e.g., use of data to monitor implementation quality and outcomes), to put in place systems to recognize students' positive behavior and reduce rates of discipline problems, and to implement a continuum of programs to meet school-wide goals related to student achievement, climate, and safety. The coaches also have expertise in functional behavioral assessment and behavioral supports, and they draw upon this knowledge in helping the school-wide and student-specific teams identify supports that meet student needs.

There is a growing evidence base for the effectiveness of the universal element of PBIS (Horner, Sugai, & Anderson, 2010), referred to as school-wide PBIS (SWPBIS). Two recent randomized controlled trials (RCTs) of SWPBIS in elementary schools demonstrated significant impacts on office discipline referrals, suspensions, behavior problems, and school climate (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Bradshaw, Koth, Thornton, & Leaf, 2009; Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2009; Waasdorp, Bradshaw, & Leaf, 2012). There is also some evidence of an impact of high-quality PBIS implementation on academic performance (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2009). The coaching used in SWPBIS is just one component of the intervention, and its effects have not been explicitly examined.

The PBIS*plus* coaching model expanded on the typical coaching provided in SWPBIS and integrated technical, collaborative, and reflective coaching approaches (Denton & Hasbrouck, 2009) to support elementary teachers in their implementation of evidence-based classroom management practices and tier 2, targeted preventive interventions. The goal of the coaching was to support teacher skills to address student needs through training in the implementation of functional behavioral assessments, the teaming process, cultural proficiency, and evidence-based programs (e.g., Check-In/Check-Out; Hawken & Horner, 2003). Coaches accomplished this through

observing and providing feedback to teachers, modeling the use of evidence-based tools and processes, and delivering formal, didactic professional development sessions. All PBIS*plus* coaches were doctoral-level external consultants, each of whom had over 15 years of experience promoting implementation of evidence-based programs. Preliminary findings from the 3-year PBIS*plus* RCT involving 42 elementary schools indicated significant, although modest, impacts on staff ratings of their own efficacy to handle behavioral problems (Bradshaw, Pas, Goldweber, Rosenberg, & Leaf, 2012). Furthermore, there were statistically significant, though small, effects on the students' receipt of individualized classroom-based behavioral supports and services in PBIS*plus* schools. Similarly, there were statistically significant, though small, reductions in the teacher-reported usage of special education services and increases in ratings of academic performance (i.e., poor to excellent) at the classroom level (for further details, see Bradshaw et al., 2012). The preliminary analyses did not reveal significant effects on ratings of student behavior or academic performance on standardized tests.

Classroom Check-Up

Also grounded in behavioral theory, the Classroom Check-Up (CCU, Reinke, 2006) is a classroom coaching model designed to provide support for classroom teachers while minimizing the fidelity problems common to school-based consultation efforts (Reinke, Lewis-Palmer, & Merrell, 2008). The CCU was modeled after the evidence-based and rigorously tested Family Check-Up (Connell, Dishion, Yasui, & Kavanagh, 2007), a strategy effectively used with families of children with problematic behavior. The purpose of the CCU is to increase teachers' motivation to sustain the use of practices that are identified as strengths and promote student success, while supporting the development of weaker skills identified through an assessment process coordinated by the coach. CCU utilizes a combination of components that include a survey of the classroom's ecological factors, direct observation of the teacher, visual performance feedback (Reinke, Lewis-Palmer, & Martin, 2007), and motivational interviewing (Miller & Rollnick, 2002). Through the CCU model, the coach conducts classroom observations and assessments, and the teacher receives feedback on the results. During the feedback, the coach discusses both strengths and potential areas of need. The teacher and coach collaboratively develop an action plan for change and select from a menu of evidence-based interventions targeting the identified teacher behaviors and student outcomes (see Reinke, 2006; Sprick, Knight, Reinke, & McKale, 2006). The coach provides ongoing support and performance feedback, which is eventually faded so the teacher can learn to self-monitor progress of the chosen intervention using an intervention procedural checklist.

There is growing interest in the CCU as both an intervention to promote effective classroom management and a coaching model or framework for increasing the implementation of other evidence-based programs. Research by Reinke et al. (2008) using a single-subject, multiple baseline design indicated that teachers' use of different classroom management strategies changed as a result of using the CCU; the changes were greatest when the teacher received visual performance feedback. As the use of recommended strategies increased, the incidence of student disruptions decreased. The CCU has also been adapted and integrated with other models, such as social-emotional learning and classroom management programs, to increase implementation quality (Reinke et al., 2012) and is being used as a framework for increasing cultural proficiency and student engagement to reduce the disproportionate representation of culturally and linguistically diverse students in discipline data and special education (Bottiani et al., 2012).

MyTeachingPartner

Similar to the CCU, the MyTeachingPartner (MTP, Pianta, Mashburn, Downer, Hamre, & Justice, 2008) consultancy model is a data-driven professional development approach

focused on improving teacher-student interactions in classroom environments. Ongoing, targeted discussion between consultants and teachers focuses on providing teachers with labels for describing effective teacher-student interactions, opportunities to observe their own interactions and those of other teachers, and feedback that is individualized and specific to classroom practices. This is accomplished by building on the framework of the well-validated Classroom Assessment Scoring System (Pianta, La Paro, & Hamre, 2008), which organizes effective teacher-student interactions according to three domains of support: Emotional Support, Classroom Organization, and Instructional Support (Hamre et al., 2013). Teachers videotape a series of up to 60-min segments of classroom instruction and submit the recordings to the consultant, who reviews them and provides feedback related to the three CLASS domains. MTP can be applied across diverse curricula, classroom contexts, and developmental ranges including preventive interventions targeting mental health, behavioral, and social outcomes (Pianta, Mashburn., Downer, Hamre, & Justice, 2008). The consultant encourages the teacher to reflect on highlighted interactions and provides links to related video segments of interaction exemplars located in an online video library. Much of the coaching is web based and occurs via videoconferencing and phone consultation, and therefore, it can be conducted remotely.

The effectiveness of MTP has been documented in an RCT including 113 prekindergarten teachers; the trial demonstrated significant impacts on effective teacher-student interactions as measured by the CLASS (Pianta, Mashburn et al., 2008). The greatest increases in quality were observed in classrooms comprised entirely of students of low socioeconomic status. Also, students of teachers who participated in MTP showed higher scores on receptive language than students in the control condition (Mashburn, Downer, Hamre, Justice, & Pianta, 2010). A second RCT was recently conducted with secondary classroom teachers and demonstrated similar impacts on teacher-student interactions and student achievement (Allen, Pianta, Gregory, Mikami, & Lun, 2011).

Behavioral Consultation

Behavioral consultation is typically a child-focused approach whereby a consultant works with a teacher and engages in a staged problem-solving process whereby a problem is identified and analyzed and then a plan is developed, implemented, and evaluated (Kratochwill & Bergan, 1978). Though the stages are clearly delineated, this is not a linear process, and stages may be revisited as needed (Pas, 2012). Consultants have expertise in education, principles of applied behavior analysis, and program evaluation. The consultee (i.e., teacher) is expected to implement the plan developed; however, the consultant monitors and ensures high implementation in order to facilitate the evaluation stage (Kratochwill & Bergan, 1978). As a result, fidelity is a main focus in the literature on behavioral consultation (e.g., Wickstrom, Jones, LaFleur, & Witt, 1998). Small studies using convenience samples have reported positive effects of training in behavioral consultation on consultants and consultees (Kratochwill, Elliott, & Busse, 1995; Lepage, Kratochwill, & Elliott, 2004). The principles of behavioral consultation have been applied to the development of other models, which have been more rigorously tested.

Conjoint Behavioral Consultation

An extension of the behavioral consultation model is Conjoint Behavioral Consultation (CBC, Sheridan & Kratochwill, 2007), in which the consultant works through a behavioral problem-solving process with a teacher and parent(s) regarding a student's disruptive behaviors. Through the CBC process, a target behavior is identified, the consultation triad works to develop at-home and in-school behavior plans, and the intervention is evaluated (Sheridan, Bovaird, Glover, Garbacz, & Witte, 2012). Consultants are trained in the staged process, evidence-based behavioral interventions, and home-school collaboration.

A recent RCT of CBC randomized 82 classroom teachers in 21 schools to the intervention and addressed the needs of a maximum of three

students per classroom, based on behavioral need selection criteria. Students were randomized to the intervention when more than three students in a classroom displayed need. The same procedures were used to identify the control teachers and students. The unit of assignment and analysis for this study was students, and therefore, the outcomes are focused on the targeted and comparison students only (i.e., not all students in the school). This study reported significant effects on student outcomes including teacher- and parent-reported social skills and teacher-reported adaptive skills as well as improvements in teacher-reported relationships with parents. There were no significant effects on parent-reported adaptive skills and externalizing behaviors or on parent-reported relationships with teachers (Sheridan et al., 2012).

Instructional Consultation

The Instructional Consultation (IC, Rosenfield, 1987) model is also a staged problem-solving model and explicitly targets the professional development of the consultee (i.e., teacher; Rosenfield, 1987). In addition, IC emphasizes consultants' use of communication skills to promote successful problem solving with a focus on student academic functioning. Consultants work with teachers to establish whether there is an instructional match between the target student's prior knowledge and the work expected of the student in the classroom, to rule out academic mismatch as a source of behavioral concerns. The duo specifically targets evidence-based instructional practices which take into account instructional match and student prior knowledge, as well as students' working memory. Consultants are trained in the problem-solving stages, communication skills which facilitate a collaborative working relationship, and academic assessment (Vu et al., 2013).

A 3-year RCT of IC involving 34 schools examined outcomes for the entire school population, though not all teachers in the treatment schools referred a student (or students) to the IC process (Berger et al., 2012). There were significant effects on teacher efficacy and teacher collaboration, but not instructional practices or job satisfaction (Vu et al., 2013). Student outcomes have not yet been made available.

Reading First

The Reading First model was established to promote teachers' use of evidence-based reading instruction practices and the use of screening to identify struggling readers (Gamse et al., 2008). In the model, teachers are expected to intervene with those students who are identified by the screening and then monitor student progress. This is supported through the provision of professional development and coaching to teachers, to ensure their implementation of evidence-based practices (Gamse et al.). Reading First is similar in its approach to Response to Intervention (i.e., the use of screening, intervening, and progress monitoring within the context of evidence-based practices) (Fuchs & Fuchs, 2006) and can be applied to the other coaching approaches reviewed. It should be noted that coaching is only one component of this reading intervention and the effects of coaching cannot be isolated.

A strong 3-year quasi-experimental study examined the effects of the Reading First initiative in 248 schools across 13 states (Gamse et al., 2008). The findings were mixed, with positive effects on teacher practice and on the isolated student skill of decoding (for one grade level); however, these effects did not translate into improvements on broader tests of student achievement, such as the reading comprehension subtest on the Stanford Achievement Test-10 (SAT-10, Gamse et al.). The study did show statistically significant gains in the exposure of Reading First teachers to professional development and coaching as well as the amount of time spent on the essential components of reading (Gamse et al.). In contrast, studies from individual states, using quasi-experimental designs, have reported significant effects on student achievement using state measures (e.g., Bean, Draper, Turner, & Zigmond, 2010; Carlisle, Cortina, & Zeng, 2010; Dole, Hosp, Nelson, & Hosp, 2010; Foorman, Petscher, Lefsky, & Toste, 2010).

Early Reading Professional Development Interventions Study

Another reading intervention was tested in the 90-school Early Reading Professional Development (PD) Interventions Study (Garet et al., 2008). This trial isolated the effects of coaching specifically by utilizing an RCT design with two different 1-year treatments (a summer institute consisting of 8 days of reading instruction training for teachers and the same institute plus a part-time coach in the school) versus a control condition. Coaches were expected to provide an average of about 60 hours of coaching to each teacher in the instructional content, as well as practice opportunities and feedback. Similar to the Reading First findings, both the PD and PD plus coaching conditions demonstrated significant improvements in teacher knowledge and use of empirically-based instructional practices, but no significant impacts on student achievement (Garet et al., 2008). Moreover, there were no significant differences in teacher practices between the PD only and PD plus coaching conditions. As with Reading First, implementation analyses showed that teachers did in fact receive the expected hours of coaching.

Critical Themes for Effective Coaching of Teachers

There continues to be growing interest in coaching, both as an intervention and as a means for promoting high-quality implementation of other interventions. Coaching is a promising approach, as it targets teacher quality generally and can be used specifically to support the implementation of prevention programs. Coaching can embed practices such as reflection on instruction and guided practice, which are often lacking from the training and in-service experiences of teachers. Despite the potential of the coaching approach, the more rigorous studies examining the impacts of behavioral, social-emotional, as well as academic interventions have generally produced mixed findings; studies report positive impacts on proximal outcomes, such as teacher knowledge, practice, efficacy, and attitudes but fewer positive effects on broader, more distal outcomes like student achievement.

One possibility for the pattern of effects on proximal, but not distal, outcomes is an issue of time. The theory of change model for these coaching and consultation models is that by supporting teachers' skill development, their perceptions about their ability to intervene successfully with struggling students will change, as will their instructional practice (Han & Weiss, 2005). In turn, it is expected that student behavioral and achievement outcomes will improve. The literature on institutional change suggests that 3 years may not be long enough to ensure that this type of change in teachers translates into distal outcomes (Hall & Hord, 2010). Therefore, in order to ensure effective coaching of teachers, it is critical for school-based personnel to allow for adequate time to implement a coaching strategy.

A growing body of evidence suggests that regardless of a program's specific content or delivery mode, programs require some form of professional development or delivery strategy to be implemented effectively (Aber, Brown, & Jones, 2003; Noell, Witt, Gilbertson, Ranier, & Freeland, 1997; Payton et al., 2000; Perry, Murray & Griffin, 1990; Ross, Luepker, Nelson, Saavedra, & Hubbard, 1991; Witt, Noell, LaFleur, & Mortenson, 1997). A research area that is lacking in the coaching literature is the level of coaching (i.e., duration, intensity) that is needed to ensure that teachers learn and sustain new practices in order to positively impact student outcomes (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Relatively few of the rigorous studies of coaching provide detailed information on the amount of coaching or consultation that is received, and none specifically tested the effects of intensity. Furthermore, some coaching models, like the PBIS model, include coaching supports provided to multidisciplinary teams as well as individual teachers. The efficacy of these models may vary as a function of both the amount of time and the specific venue or target of the coaching, yet there has been no research to date that has experimentally manipulated these factors.

Similarly, a variety of approaches are often employed by coaches, such as whether the coach

serves as an expert or collaborator, the extent to which the model is manualized or prescribed, the extent to which teachers receive feedback about their intervention integrity, and the role of data in tailoring the coaching process. It is possible that particular elements, such as taking a prescribed approach, contribute to the effectiveness of coaching teachers. On the other hand, schools are increasingly looking to broader, more flexible interventions that can be tailored to the school's needs. This is an area to be considered in the training and practice of school-based mental health providers in selecting a specific coaching approach for working with teachers. Unfortunately, this is also an area lacking in the research; studies have not experimentally compared different elements or tested individual components of coaching to determine their effects. This type of research is needed to guide how coaches are trained, as discussed in greater depth below.

Finally, a common theme across several of the coaching models was the use of data to guide the implementation process – in some instances, tailoring the types of supports to meet the individual teacher's pattern of needs (Reinke, 2006; Scott & Martinek, 2006). In practice, these data are important in providing feedback to promote teachers' behavior change and maintenance of change. The use of data and feedback should be examined scientifically to determine the amount of coaching teachers need to receive in order to ensure that they develop a thorough working knowledge of the core program principles and are able to translate the principles into practice (Adelman & Taylor, 2003; Dusenbury, Brannigan, Falco, & Hansen, 2003; Fagan & Mihalic, 2003; Rose & Church, 1998). Additional research is needed to identify which types of data (e.g., self-report, observation, structured interview) are most informative in guiding the coaching process.

Future Directions for Research

Research shows that adequate time is needed to allow for implementation of interventions to occur and for effects to emerge (Hall & Hord, 2010). Similar to the above-noted consideration that allowing enough time to practice coaching is needed, longer research studies are also necessary to fully capture the distal (i.e., student) outcomes that are desired. Each of the coaching studies reviewed here occurred for three or fewer years, and some were even shorter (e.g., the Early PD Study was just 1 year, MTP was two) and may contribute to the phenomenon that generally proximal, but not distal, outcomes are detected in these studies.

Another area for future research is on the core components of coaching models. Currently, coaching approaches are "packaged" interventions that incorporate a number of techniques which may differentially contribute to the outcomes observed. To date, these individual components have not been explicitly studied or compared to one another. Therefore, further study on the specific components of coaching is needed. Similarly, our understanding of classroom coaching also demands a closer examination of the factors which may enhance or detract from the implementation integrity and diffusion of these models.

Taken together, the extant research suggests that coaching and consultation models are a promising approach for improving the quality of supports provided to teachers. This in turn may improve student behavioral, social-emotional, and academic outcomes. Additional research is needed, however, to identify the core elements of coaching and to discern which particular models of coaching are most effective at reducing student mental health problems.

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Supporting Teachers Through Consultation and Training in Mental Health

Jennifer E. Gibson, Sharon Stephan, Nicole E. Brandt, and Nancy A. Lever

Introduction

Teachers are likely to have multiple students in their classroom with social, emotional, or behavioral difficulties. For example, when just considering attention-deficit hyperactivity disorder (ADHD), approximately 5 % of children and adolescents are diagnosed with ADHD, which translates to an average of one or two students with ADHD in a typical classroom (National Research Council and Institute of Medicine, 2009). With the rate of all diagnosable mental health conditions currently estimated at 12 % to 22 % for children and adolescents, most classroom settings will be impacted by the serious and persistent symptoms of mental health disorders (National Research Council and Institute of Medicine). Research demonstrates that students with mental health difficulties often struggle in the classroom with regard to academic achievement and social-emotional and behavioral functioning (Frojd et al., 2008; Loe & Feldman, 2007; Mayes & Calhoun, 2007; Mychailyszyn, Mendez, & Kendall, 2010). As a result, teachers are accountable for supplementing traditional academic instruction with a variety of formal interventions and accommodations (e.g., Individualized Education Plan, 504 Plan) and informal supports for students with mental health difficulties.

In addition to supporting students with mental health difficulties, research suggests that teachers should integrate social-emotional learning (SEL) programs and positive behavioral interventions and supports (PBIS) into their classrooms in order to promote mental health and positive behavior for all students (Durlak & Weissberg, 2011; Sugai et al., 2010). Goldstein and Brooks (2007) assert that teachers must move from focusing solely on remediating problems to proactively promoting the positive outcomes they want to see. A recent meta-analysis indicates that SEL programs—which teach students valuable emotion identification and management strategies along with other skills beneficial for interpersonal relationships—promote positive social, emotional, and behavioral development; reduce symptoms of several common childhood mental health disorders; and are associated with impressive academic gains in the form of achievement tests and school grades, with an average 11 percentile points gain in academic achievement (Durlak & Weissberg, 2011). Likewise PBIS—which uses a systems approach to changing the school culture and implementing a tiered model of behavioral interventions —has been shown to decrease office referrals and suspensions, improve

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perceptions of school safety, and increase academic performance, particularly in reading (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2009; Luiselli, Putnam, Handler, & Feinberg, 2005). These positive outcomes have led many schools to adopt SEL programs and PBIS and for more teachers to implement these positive approaches in their classrooms.

Clearly, the modern job description for teachers extends beyond providing traditional instruction and includes aspects of mental health care (Rothi, Leavey, & Best, 2008). This raises many questions: What training do teachers receive related to mental health promotion, prevention, and intervention? How do they feel about their role as mental health providers? Further, how can mental health professionals support teachers as they promote positive student mental health? The answers to these questions provide reason for both concern and optimism. This chapter begins by exploring teachers' training in student mental health, feelings of preparedness to support students with mental health problems, and desire for support from the mental health community. The remainder of the chapter provides an overview of school mental health consultation as a mechanism for equipping teachers with the skills to address student mental health.

Teacher Training in Student Mental Health

There is a discrepancy between the identified role of teachers in mental health care and their training related to mental health. The United States (US) Surgeon General identified teachers as "frontline" mental health workers, who should be trained to recognize and manage child and adolescent mental health difficulties (U.S. Department of Health and Human Services, 2000). Yet, there is no national mandate that teachers receive mental health training, and teacher candidates are not required to exhibit competency in areas related to mental health (Koller & Bertel, 2006). A few states have mandates related to training in certain mental health topics. For example, Connecticut requires that local boards of education provide teachers, administrators, and support staff with professional development on drug and alcohol abuse prevention, health and mental health risk reduction, the growth and development of children with special needs, and school violence prevention (Connecticut Board of Education, 2011). Similarly, Minnesota requires that teachers seeking to renew their license demonstrate that they have received professional development in the past 5 years related to the warning signs of early onset mental illness and how to respond when warning signs are observed (Minnesota Office of the Revisor of Statutes, 2009). In Ohio, all school personnel are required to obtain in-service training on the promotion of positive youth development and the prevention of substance abuse, child abuse, and violence. This training must also include attention to the board's policy on harassment, intimidation, and bullying (Ohio General Assembly, 2012). These states are the exception, with most states not specifying this professional development need.

Even with mandates in place, the amount of professional development related to student mental health is limited; furthermore, these mandates do not affect preservice training. As Burke and Paternite (2007) poignantly describe, "Although teachers typically receive extensive preservice and in-service preparation in curriculum and instruction, they receive little or no education concerning the intra- and interpersonal dimensions of teaching and learning in classrooms. Teachers, ill-equipped to deal with mental health needs—either their students' or their own—are left to their own devices to cope" (pp. 21–22). There are three areas of psychology that are particularly relevant to teaching school-age students, including child and adolescent development, mental health problem identification and early intervention, and behavior management techniques, that will be briefly reviewed.

Child and Adolescent Development

Dr. James Comer (2005), a leader in prevention programming and education reform, argues that a greater focus on child development in teacher

training programs is the key to improving our nation's education system. The National Council for Accreditation of Teacher Education (NCATE, 2008) requires schools of education to demonstrate that their teacher candidates understand development in childhood and adolescence and the relationship of cognitive and affective development to learning. Indeed, an NCATE survey revealed that 90 % of teacher preparation programs required teacher candidates to take at least one course on child and adolescent development; yet, over half of the program representatives who responded to the survey stated that this requirement was insufficient to properly prepare teachers for effective practice (Pianta, Hitz, & West, 2009); thus, more preservice training is warranted.

Mental Health Problem Identification and Early Intervention

Generally, preservice teacher training programs pay very little attention to recognition of and early intervention for students' mental health needs (Koller & Bertel, 2006). While most preservice teachers are required to take a general psychology course, the content of the course does not typically focus on, or even cover, child and adolescent mental health issues. Furthermore, Langer (2009) reports that teachers may view courses in psychology as something to "get done" rather than an important component of training. Once in the field, teachers are often unaware of the mental health resources available in their school and surrounding community, as well as the evidence-based practices for supporting students with emotional and behavioral problems. In a study of five school districts (Stormont, Reinke, & Herman, 2011), most teachers were unaware of 9 out of 10 of the evidence-based practices for supporting students with emotional and behavioral problems and were unsure of the assessment and treatment services available within their school. More than half of the teachers did not know if their school provided functional assessment and intervention planning services (Stormont et al.).

Behavior Management

Research suggests that teachers are woefully unprepared in behavior management. A report from the American Psychological Association, Coalition for Psychology in Schools and Education (2006) revealed that 50 % of teachers reported receiving a lot of training, 37 % reported some training, 10 % reported little training, and 3 % reported no training in behavior management. Notably, those teachers who reported receiving a lot of training were more seasoned. For example, 59 % of teachers with 10 or more years of experience reported receiving a lot of training in behavior management compared to 19 % of first year teachers (Coalition for Psychology in Schools and Education). This suggests that much of the training in behavior management occurs on-the-job; however, professional development in this area is also lacking. Not surprisingly, first year teachers ranked behavior management as their highest professional development need, while experienced teachers ranked it as their second highest professional development need (Coalition for Psychology in Schools and Education). These findings indicate the need for increasing the quantity and improving the quality of preservice training, as well as on-the-job support related to effective behavior management.

Professional Development Procedures

Traditional models of professional development that are short term and disconnected from the actual daily challenges of the classroom have been criticized as ineffective in impacting teacher behavior or student outcomes (U.S. Department of Education, National Center for Education Statistics, 1999). Research suggests that professional development is most effective when it combines knowledge building with skill building and offers follow-up support (Blank, de las Alas, & Smith, 2008). Models that combine didactic training with ongoing consultation are ideal because they support teachers over an extended period of time and offer feedback and advice to address real-time problems in a

work-learn-work sequence. As discussed later, such models have proven more effective than didactic professional development alone.

New Evidence on Teacher Preparation

A recent, online national survey of educators conducted by the Center for School Mental Health (CSMH; Gibson, Brandt, Stephan, & Lever, 2013), a federally funded national center for advancing mental health in schools, provided additional evidence that teacher training in mental health is limited in the US (Tables 1 and 2). On average, participants reported "some" preservice training in implementing SEL programs, identifying student mental health concerns, and supporting students with mental health concerns in their classroom. They reported slightly higher rates of preservice training in childhood development and classroom behavior management strategies and the least amount of preservice training in making a referral for mental health services. Participants reported having the most on-the-job training in classroom behavior management and the least on-the-job training in identifying mental health problems and making referrals. Teachers also reported variability in their ability to support students with specific mental health problems in the classroom and reported being the least prepared to work with students with depression or bipolar disorder, abuse or trauma, and substance abuse.

Table 1 Preservice training of educators in mental health topics

	None to very little (%)	Some (%)	A lot (%)
Child/adolescent development	8.7	41.2	50.0
Behavior management	11.5	45.9	42.6
Social emotional learning	22.7	47.9	29.3
Identifying problems	28.0	47.2	24.8
Supporting students	34.1	44.5	21.4
Making a referral	40.4	39.5	20.2

Table 2 On-the-job training of educators in mental health topics

	None to very little (%)	Some (%)	A lot (%)
Child/adolescent development	18.1	47.2	34.6
Behavior management	12.8	40.0	47.2
Social emotional learning	13.5	46.1	40.4
Identifying problems	27.0	42.0	31.0
Supporting students	21.6	43.2	35.2
Making a referral	27.0	45.2	27.8

A Call for Support

A lack of or limited training in student mental health likely contributes to teacher burnout and turnover. Up to 50 % of teachers leave the field within 5 years, and more than one third of those who stop teaching cite student behavior problems as a primary reason for their dissatisfaction with the field (Ingersoll & Smith, 2003). When teachers leave, students' may lose their sense of connection to their school and a positive adult who promotes educational attainment, as well as time and consistency in academic instruction (Burke & Paternite, 2007). Teachers who remain in education report high levels of stress (Kyriacou, 2001) that are associated with challenges in managing students' social, emotional, and behavioral difficulties (Chen & Miller, 1997). Indeed, research suggests a strong relationship between students' behavior and teacher burnout (Burke, Greenglass, & Schwarzer, 1996; Friedman, 2006; Kokkinos, 2007; McCormick & Barnett, 2010). In one study, teachers perceived students with mental health problems as impacting them in several ways, including increasing the need to use classroom management strategies, contributing to job stress, and negatively influencing their own mental health, all of which they believed hindered their ability to effectively teach (Rothi et al., 2008). With additional quality training that facilitates skill development, teachers may be less burdened by these difficulties.

Teachers have indicated that knowledge of the students' mental health needs is critically important for their success (Koller, Osterlind, Paris, & Weston, 2004). They feel a duty to help care for the mental health needs of their students but feel unprepared to recognize and intervene with students facing mental health challenges (Koller et al.; Rothi et al., 2008). Teachers report an interest in being trained in preventing mental health problems, recognizing the early signs of mental health problems, making referrals, and supporting students with mental health problems in the classroom through behavior management and other strategies (Doyle & Houtz, 2009; Rothi et al., 2008). Further, a multistate study found that the majority of teachers (62 %) and administrators (63 %) reported a desire for increased consultation from school mental health professionals (Gilman & Gabriel, 2004).

School mental health professionals are well positioned to respond to teachers' calls for assistance. Training and consulting with educators is a vital component of a comprehensive approach to school mental health and should be a priority for school mental health providers. Thus, providers should spend a substantial portion of their time and energy collaborating and consulting with educators (Burke & Paternite, 2007; Caplan, 1963; Paternite & Johnson, 2005). However, if school mental health providers are to work with educators additional questions must be answered. Most prominently, what are the most effective ways for school mental health providers to support teachers? To answer these questions, we turn to the literature on school mental health consultation.

Overview of School Mental Health Consultation

A definition of school mental health consultation, offered by Judith Alpert (1976), describes "the process in which a mental health professional assists another, called the consultee, regarding clients for whom the latter has responsibility. In school, the clients are students, whereas the consultees are teachers, administrators, aides, or other school staff" (p. 620). The consultant and teacher engage in voluntary, collaborative, and solution-focused interactions (Rubin, 2008). The goal is for the consultant to enhance the teacher's knowledge, skills, confidence, or objectivity so that the teacher can address a current problem, as well as similar problems that may arise in the future (Alpert, 1976; Caplan, 1963; Gonzalez, Nelson, Gutkin, & Shwery, 2004). By working with a teacher, who then teaches and supports many students, the mental health provider is able to reach more students via the teacher than through individual interactions with students (Goldstein & Brooks, 2007).

Teacher consultation may be focused on treatment for a student, or promotion and prevention efforts, such as working with a teacher to improve classroom behavior management strategies or implement a SEL program (Alpert, 1976; Meyers, Meyers, & Grogg, 2004; Rubin, 2008). Alternatively, consultation may focus on whole school-level change (Meyers et al., 2004). For example, a consultant may work with a committee of teachers to assess bullying in their school and implement a school-wide bullying prevention program to address the needs of the entire student body. Thus, consultation can focus on one student, a small group of students, one or more classrooms, or the entire school.

Often there is a structured process by which consultation occurs. For example, behavioral consultation (a specific model for school consultation described later in the chapter) follows a four-stage process of problem identification, analysis, treatment implementation, and evaluation (Sanetti & Kratochwill, 2008). When necessary, consultation can also be an iterative process. If the evaluation suggests a lack of positive outcomes, the consultant and consultee(s) may revisit their analysis of the problem and select an additional or alternative solution to implement. This cycle can be repeated until the consultant and consultee are satisfied with the outcomes (Goldstein & Brooks, 2007; Gonzalez et al., 2004). At the program implementation level, consultation may begin with training, followed by a series of observations with feedback until the program is successful (Han & Weiss, 2005).

It is worth noting that mental health consultants can come from a wide array of mental health fields, including school psychology, school social work, clinical psychology, counseling psychology, or other mental health fields (e.g., psychiatry, nursing, occupational therapy). Some fields, such as school psychology and clinical psychology, include direct training in mental health consultation as a result of didactic requirements (American Psychological Association, Commission on Accreditation, 2009; Anton-La Hart & Rosenfield, 2004). The degree to which providers consult in a school is likely related to their training in the skill, as well as the constraints imposed by their particular role within the school. Some school mental health providers are more constrained by the role they have been asked to play in schools. In some settings, school psychologists report that they want to spend more time consulting, but are unable to do so due to their need to spend over two thirds of their time dedicated to special education eligibility assessments (Gonzalez et al., 2004; Stoiber & Vanderwood, 2008).

Models of Teacher Consultation

There are numerous models of mental health consultation, many of which have been used with educators. These models vary with regard to the focus of consultation, the number of participants engaged in the consultation process, and the degree to which the consultant takes a collaborative versus directive approach. One way to differentiate consultation models is to examine their focus: client-centered, consultee-centered, or system-centered (Meyers et al., 2004). The type of consultation used should depend on the focus of change efforts. Consultants should ask themselves: Who or what are we attempting to change? Client-centered models are appropriate when the aim is to help educators better support an individual student with an identified social, emotional, academic, or behavior problem. The focus of change for client-centered models is on changing some aspect of the student. In contrast, consultee-centered models focus on educators and attempt to change educators' feelings and behavior so that they can more effectively work with students. Finally, system-centered models of consultation focus on changes to the whole school, such as school climate, policies, and daily practices.

Another difference between models of consultation is the number of consultees and consultants who are involved. The traditional model involves one consultant working with one consultee. However, there has been some support for a team approach in which multiple consultants, preferably from different disciplines, work together to assist one or more educators (Meyers et al., 2004). In addition, some authors have strongly argued for the benefit of group consultation, in which multiple educators meet together with one or more consultants. Cohen and Osterweil (1986) found that group consultation reduces educator's feelings of isolation, allows educators to offer emotional and practical support to each other, and reduces the educators' reliance on the consultant. This is also an economical and efficient way to provide consultation. Due to the time and money saved via group consultation, Meyers and colleagues (2004) believe that it is likely to become more widely used. Finally, Sheridan and colleagues have proposed a Conjoint Behavioral Consultation (CBC) that joins together parents and teachers with a mental health consultant in order to address behavioral, social, and academic needs for a child in both the home and school environments. Research has demonstrated that CBC leads to more lasting behavioral change than teacher-only consultation (Sheridan, 1993).

A final difference between consultation models is the degree to which the consultant takes a directive or nondirective approach. The majority of current models use a fairly nondirective and collaborative approach (Sheridan & Cowan, 2004). According to Alpert (1976), consultants who use a nondirective approach avoid giving advice. Instead, they help educators to come up with their own solutions. Rather than telling educators what they should do, consultants allow educators to discuss their feelings, engage in problem-solving discussions, and provide instruction, modeling, and encouragement as

needed (Alpert). Likewise, Sheridan and Cowan (2004) describe the need for equal say in decision-making. This model recognizes that both consultee and consultant bring expertise (in different areas) to the relationship. Nondirective consultation is clearly different from a hierarchical relationship in which the consultant tells the educator what to do without input or negotiation. For this approach, teachers are active participants in the consultation rather than passive recipients of information and instructions. A nondirective approach to consultation is well aligned with ideas from community psychology about empowerment and sustainable change.

There are three specific models of consultation that have been widely used in schools and vary in their focus, typical number of participants, and degree of directivity (Sheridan & Cowan, 2004). The three models, mental health consultation, behavioral consultation, and organizational development consultation, will be briefly reviewed.

Mental Health Consultation

The mental health consultation model aims to help the consultee understand how their feelings and actions contribute to a problem and assist them in developing perceptions, attitudes, and emotions that allow them to more effectively interact with clients (Caplan, 1963; Sheridan & Cowan, 2004). This model may be particularly useful when an educator believes that factors related to the child or family are to blame for the child's difficulties and that factors related to the teacher, classroom, and school environment do not matter (Soodak & Podell, 1994). In mental health consultation, the consultant uses questioning, processing, modeling, or teaching strategies to impact the consultee's thoughts and feelings about a client or situation. For example, a consultant may work with a teacher to better understand why a student is exhibiting off-task and disruptive classroom behavior and what the student's behavior elicits in the teacher. In this example, the consultant's goal is to increase the teacher's empathy for the student so that the teacher can act supportively towards the student rather than criticizing his or her behavior.

Behavioral Consultation

In contrast, behavioral consultation is more focused on changing the environment in order to improve clients' behavior. The consultant works with the consultee to identify aspects of the environment that reinforce client behavior and then removes those aspects that reinforce problematic behaviors while bolstering those aspects that reinforce positive ones. This is followed by evaluation of whether the intervention was effective (Sheridan & Cowan, 2004) and modification of the intervention as needed. Functional behavioral analysis is a specific technique often used in behavioral consultation. For example, a consultant may help a teacher to identify the triggers for a child's aggression and prevent those triggers. In addition, the consultant may help the teacher to create a system for rewarding the child when refraining from aggression and solving problems in an appropriate manner.

Organizational Development

Organizational development is quite different from both mental health and behavioral consultation. The focus is not on changing individuals, but on improving entire systems through assessment and intervention (Sheridan & Cowan, 2004). An organizational development consultant may work with an entire school to improve communication techniques, problem-solving approaches, or the relationship between school personnel.

Emerging Models

More recently, research has focused on alternative and hybrid models of consultation in school. For example, Tysinger and colleagues (2009) advocate for a collaborative-directive model of consultation that enables the consultant to engage in shared decision-making with the consultee

when possible but also to be prescriptive when more direct advice is warranted. This model recognizes the right of the consultee to reject suggestions made by the consultant, as well as their ability to develop their own solutions and contribute to the consultant relationship, while also acknowledging that sometimes a more directive role is appropriate.

A second new model, based on social diffusion theory, trains teachers to act as consultants to their peers. Diffusion theory states that certain people, known as key opinion leaders (KOL), are able to persuade others in their social network to adopt new interventions. Atkins and colleagues (2008) recruited peer-identified KOL teachers and asked them to provide consultation to other teachers in their school regarding the use of classroom practices for children with ADHD. Compared to teachers who received standard mental health consultation alone, the teachers who also received consultation from KOL teachers were more likely to report using the classroom practices. These findings indicate that in order to increase the likelihood of teachers implementing recommended interventions, consultants may want to focus their efforts on training and working with a select group of KOL teachers, who would then work with their peers. This approach recognizes natural leaders within the school environment and may be especially useful in school environments where there is a distrust of outside providers or pessimism about mental health interventions (Atkins et al.).

Empirical Research on Consultation

Mental health consultation, behavior consultation, and organizational development have been well researched and found to be effective (see meta-analysis by Medway & Updyke, 1985). However, in schools, behavioral consultation has received the most empirical and clinical attention, while organizational development consultation has received the least attention (Sheridan & Cowan, 2004). Substantial research demonstrates that behavior consultation is effective in providing teachers with strategies to improve current and future student behavior and is highly accepted by teachers (Kratochwill, Elloitt, & Busse, 1995; Sheridan, Welch, & Orme, 1996). While each of these models is an appropriate option for teacher consultation, behavioral consultation has the most robust research support.

Decades of research has revealed effective strategies that teachers can use to support the mental health of their students, but all too often these strategies are unknown, unused, or misused by educators (Sawka, McCurdy, & Mannella, 2002). Community science is a framework for reducing the gap between research on effective interventions and the implementation of these interventions in the real world (Flaspohler, Anderson-Butcher, Paternite, Weist, & Wandersman, 2006). This framework proposes that mental health professionals can close the gap between research and the real world by working with stakeholders (i.e., educators) to tailor research-based interventions to fit their needs and building the stakeholders' capacity to implement and evaluate these interventions. The role of a consultant is to provide training followed by technical assistance. While training is a time-limited and directive interaction, in which the consultant provides information and teaches skills, technical assistance involves ongoing support for implementation (Flaspohler et al.). This twofold approach to supporting teachers provides teachers with an intensive early learning opportunity and continuing assistance.

Teachers report that they appreciate didactic training as a means of receiving support from mental health professionals (Gibson et al., 2013). However, research indicates that this model of support has little effectiveness when used in isolation and is much more effective when followed by ongoing consultation and performance feedback (Jones, Wickstrom, & Friman, 1997; Joyce & Showers, 2002; Witt, Noell, LaFleur, & Mortenson, 1997). Joyce and Showers (2002) found that when teachers receive training alone, there is virtually no transfer of information into the classroom; however, when training is followed by ongoing coaching in the classroom, 95 % of teachers will use the new skills in the classroom. Similarly, the Strengthening Emotional Support

Service (SESS) model, which combines training and ongoing consultation, has demonstrated promising outcomes. The SESS model combines 4 days of active training (i.e., modeling, practice of new skills) in ecological behavior management, academic assessment, academic intervention, and behavior intervention with weekly consultation. The consultation is comprised of observation, modeling, feedback, and additional instruction, as requested by the teachers. The percentage of teachers who could effectively model the skills from the training increased from 43 % to 87 % after ongoing consultation (Sawka, McCurdy, & Mannella, 2002). Together, these studies suggest that a combination of training followed by ongoing consultation may be particularly well suited to schools.

In summary, each of the above models offers an appropriate, research-based option when consulting with teachers. Which model is selected should depend on the goals of consultation and preferences of the individuals engaged in consultation.

Stages of the Consultation Relationship

As with any relationship, consultation evolves over time. Often consultation is first sought by a school when there is a "crisis point" wherein a student, teacher, or the entire school is experiencing distress related to an acute problem. As the consultant assists with particular cases, trust builds, and the consultant may be invited to join in problem-solving at the program or organizational level (Abec, 1987). During this time the primary goal of the consultant is to integrate into the school culture, build relationships with the school's staff, and have a formal conversation about roles and responsibilities (Alpert, 1976; Sheridan & Cowan, 2004). Early conversations must clearly explain objectives and methods of the consultation relationship (Brown, Pryzwansky, & Schulte, 1995). A verbal or written contract may be beneficial, or even necessary, in order to clarify important details such as fees, specific responsibilities, time, and resources. To gain acceptance and trust during this stage, the consultant must demonstrate respect for educators by being a good listener, responding nonjudgmentally, and acknowledging educators as experts about their school and students (Sheridan & Cowan, 2004). It is also important to acknowledge that the teacher may be afraid of being observed by the consultant, and the consultant should provide reassurance that his or her job is to provide support, not to evaluate. This point should also be made clear to administrators so that data from observations and consultation sessions do not become part of the teacher's job performance evaluation process (Alpert, 1976; Goldstein & Brooks, 2007). One way to begin the discussion of any fears the teacher may have is to ask them about their expectations for the consultation relationship and process. In addition to opening the door to discussion of fears, this prompt allows the consultant to explain his or her theory of change and adapt an approach to better fit with the teacher's needs and desires (Tysinger, Tysinger, & Diamanduros, 2009).

Most consultation models include some form of a problem-solving stage that follows the entry phase. This may include working with the teacher(s) to collect data, identify the problem, develop a plan to address the problem, implement the planned intervention, and evaluate the outcome of the intervention. In behavioral consultation this process encompasses all fours stages: problem identification, problem analysis, intervention, and evaluation (Sanetti & Kratochwill, 2008). A systematic approach to the problem-solving stage, such as the one taken in behavioral consultation, is associated with consultation effectiveness, whereas failure to systematically engage in the above steps may lead to ineffective consultation (Meyers et al., 2004). During the problem-solving phase the consultant's focus will vary depending on the identified problem (Alpert, 1976). Gathering the data necessary to identify the primary problem is an essential step that should not be minimized.

An effective consultant will eventually work themselves out of a job. In other words, the job of a mental health consultant in schools is to help educators solve the problem that led to seeking

consultation and, more generally, to successfully teach students with a wide array of psychological strengths and weaknesses. When the consultant and consultee agree that the problem is adequately addressed and the consultee feels comfortable moving forward independently, consultation has reached the termination phase. During this phase, there may be uncomfortable feelings that should be discussed, such as doubt about being ready to end or fear of future problems (Alpert, 1976). As in therapy, the mental health provider should instill confidence where it is due while assuring the teacher that future support is available if needed.

Effectively Working in Schools

Schools are very different from other settings in which consultation may occur, such as hospitals and community-based clinics. The primary purpose of schools is to educate, not treat mental health problems, and as a result teachers and other school staff need ways to support students that will not detract from the educational process. In addition, each school has a unique culture, with differences in the climate, staff interactions, formal procedures, and unwritten rules. During the entry phase of the consultation relationship, consultants must come to understand the nuances of the school so that they can effectively adapt their approach to meet the needs of the students and staff (Gonzalez et al., 2004). In order to understand what supports are needed, the consultant must know what internal and external resources are already available (Abec, 1987). In addition, it is important to understand how change happens at that particular school (Alpert, 1976). Are decisions made top-down or more democratically? Who are the staff members that others look to for advice and who has the most influence on their peers? Most schools have a hierarchical power structure, with the administrators making decisions that are passed along to the teachers. Therefore, it is usually important to form positive relationships with administrators and gain their support for the consultation work (Goldstein & Brooks, 2007). However, administrators vary in how much information they want to know about the consultation and how frequently they want to be updated on progress. Early on, it may be useful to ask the principal and other administrators how much information about the consultation they would like and to schedule meetings accordingly. The more the consultant can tailor work to the characteristics of the school and its staff, the more likely they are to provide a service that is truly helpful.

Perhaps no element is more important to consultation than effective communication. Consultation cannot work without the ability of the consultant and consultee to speak in a "common language" (Gonzalez et al., 2004). To work with educators, consultants must understand the language of education. Many of the terms and acronyms used by educators are foreign to mental health providers, even those who regularly work with children. Consultants should take the responsibility for learning the language of the school system. For example, it is important to understand terms such as *Individual Education Plan* (IEP) and *504 Plan* and to ask the educator to clarify unfamiliar terms or acronyms. Similarly, consultants should keep in mind that teachers may not have the same understanding of mental health constructs and terms and should monitor their own use of language and modify accordingly. Even when teacher and mental health consultants use the same term, that term may not have the same meaning. For example, the consultant's understanding of "anxiety" may be different than a teacher's, and therefore, consultants should use language that is clear, be careful not to assume they understand what a teacher means, and ask for clarification when needed.

Consultants may wonder how much time they should spend at school and, more specifically, meeting with their consultees. The consultant's presence in the school demonstrates availability and commitment; thus, it is a good idea to allow time outside of scheduled meetings to visit with staff and observe how the school operates. Research demonstrates that the more hours a mental health consultant is at school, the more likely teachers are to consult with him or her (Gonzalez et al., 2004). Furthermore, the more

time that is spent in direct consultation, the more satisfied teachers are with the consultation and the more they perceive students as improved; yet, teachers are no more likely to implement recommendations of the consultant when given intensive rather than limited consultation (Tyler & Fine, 1974). Thus, consultants should recognize that extra time may lead to increased utilization and appreciation, but not necessarily changes in teachers' behavior.

When time is limited, consultants may want to focus their energy on working with KOL teachers and new teachers. As previously discussed, KOL teachers may be more successful than consultants in encouraging their peers to implement and adapt new interventions, and thus, consultants may consider training and supporting KOL teachers, who in turn support their peers (Atkins et al., 2008). Unlike experienced KOL teacher, new teachers are facing a classroom for the first time and may be struggling to find techniques that work for them. This may be why teachers with less years of experience are more likely to engage in consultation than teachers with many years of experience (Stenger, Tollefson, & Fine, 1992). New teachers report that their biggest concern is their inability to deal with student problem behaviors and that their most pressing need for support is in classroom management, with this need being particularly strong at the beginning of their first year on the job (Meister & Jenks, 2000; Stroot et al., 1999). Thus, working with new teachers on issues related to classroom management is likely to be particularly useful and appreciated.

Future Directions for Mental Health Consultation with Teachers

Mental health professionals have the knowledge and skills necessary to help teachers more effectively work with students with mental health problems and to promote mental health for all of their students. However, to improve their ability to assist teachers, it is essential that mental health professionals receive preservice training (e.g., didactic and hands-on experience) in working in schools and in consultation. Furthermore, mental health professionals would benefit from a set of resources developed specifically for use when consulting with teachers. Such a resource could include quick reference guides for the entry, problem-solving, and termination phases of consultation, and tools consultants could share with teachers. The Center for School Mental Health has been charged with developing guides for school mental health providers to use when conducting teacher consultation. Moreover, effective strategies for consultation should continue to be documented and shared. As has occurred for therapeutic interventions, as research accumulates, the field will be able to develop, test, and disseminate evidence-based models for mental health consultation with teachers.

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Models of Psychiatric Consultation to Schools

Lois T. Flaherty

Work with educators and schools has been seen as a core part of the specialty of child and adolescent psychiatry from its beginnings as part of the child guidance movement in the early twentieth century. In the beginning, assessment of a child's functioning in school was viewed as crucial to a comprehensive evaluation. In addition, many of the pioneers in child and adolescent psychiatry, such as Leo Kanner in Baltimore, were instrumental in developing special private schools for children with emotional and behavioral difficulties.[1] With the advent in 1975 of Public Law 94–142, federal legislation mandating education for all children, psychiatric services began to be expanded into all schools, and those which were either special education schools or had special education classes began to hire psychiatrists to evaluate students and assist with educational planning. At the same time, there was an expansion of school-based health as a key component in the health delivery system, and these services began to incorporate mental health services, with psychiatrists variably involved in these services. In the latter part of the twentieth century, newer models have emerged in which psychiatric consultation has been incorporated into organized school-based mental health services. This chapter will review the historical background of psychiatry in schools and describe the various models of psychiatric consultation.

Child Psychiatric Consultation: Gerald Caplan and Beyond

Psychiatrists who worked with children and adolescents have made major contributions to the field of school mental health (Berkovitz, 1970; Berlin, 1962; Comer & Woodruff, 1998). Gerald Caplan, a leader in the community mental health movement, saw schools as an important venue for delivery of mental health services and conceptualized the idea of consultation as taking place on multiple levels: client centered, consultee centered, and systems oriented (Caplan, 1970). Traditionally, psychiatric consultation involved a single psychiatrist working in a school, providing what Caplan termed

[1] Kanner, known as the "father of child psychiatry," together with pediatrician Matthew Debuskey and advocate Sadie Ginsburg founded The Children's Guild in 1953 in Baltimore. Initially serving only young children, it expanded over the years and now has programs for students through age 18 (see http://childrensguild.org).

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client-centered consultation. The major focus was on youth identified as having emotional or behavioral difficulties by teachers. Caplan defined another level of consultation—consultee-oriented consultation—as an attempt to help a consultee, whose internalized problems interfered with effective performance of some aspect of his job, and implied that this kind of consultation would have more far-reaching results as it would enhance the ability of the consultee to deal with many clients. Berlin built on Caplan's concepts and described how by focusing on a single child presented to the consultant, the child psychiatrist could help the teacher develop more effective functioning in the classroom with other children. He depicted a method of problem-solving with teachers whose own emotional reactions to certain students were hampering their ability to work with these students. He suggested that the psychiatrist use examples of his or her own struggles with patients to illustrate how this worked (Berlin, 1962). Although the relationship between the consultant and consultee was one of expert to client, one gets a sense from consultee-oriented interventions that there is a growing sense of mutuality in the work of consultant and consultee. Beginning in the 1960s, Comer developed a more systemic approach, teaching and consulting school faculty and parents about basic principles of development and psychopathology with the goal of changing the interaction between the child and adults who are important to the child (Comer & Woodruff, 1998).

These seminal notions of school consultation have evolved, so that there is now a recognition that there are many models of psychiatric consultation to schools, and a single psychiatrist may function on many levels in the role of a consultant. Some have drawn a distinction between a psychiatrist's role in the school as a clinician (i.e., providing direct medical services to students) and the role as a consultant, in which consultants use skills "that empower consultees to solve problems and mobilize their systems" (Bostic & Rauch, 1999, quoting Jellinek, 1990). But in fact, consultation can occur even when a school-based psychiatrist focuses on evaluation and treatment of individual children. By sharing his or her observations with school staff and offering explanations for behavior that may be problematic in the classroom, the psychiatrist is helping the staff to facilitate the child's social and emotional functioning, and enhancing their ability to deal with similar problems in other children.

The major evolution in psychiatric consultation has come about as a result of the recognition that to be an effective school consultant, a psychiatrist must function in a collaborative role that truly respects the expertise of all stakeholders in the system, especially that of families, who are the experts with regard to their children (Flaherty et al., 1998). Child and adolescent psychiatrists share much in the way of knowledge and expertise with other mental health professionals, including psychologists, school counselors, and social workers, but bring to bear their training and experience as physicians to their consultant role. They are not necessarily in leadership roles (although they may in some cases function as leaders of teams) (e.g., Pearson, Jennings, & Norcross, 1998) but may simply be one member of an interdisciplinary team, each of whose members brings a unique perspective and expertise.

Workforce Issues

No discussion of child psychiatric consultation would be complete without a mention of the fact that these specialists are in short supply. The total number of child and adolescent psychiatrists in the USA (at least those who are members of the American Academy of Child and Adolescent Psychiatry, AACAP) currently stands at around 8,500 (according to the organization's website, www.AACAP.org). While this number is a significant increase from the 6,300 cited in the 2002 AACAP report on workforce issues (Kim, 2003), it is nowhere near the number needed to serve all the children and adolescents who need these psychiatric services. The AACAP estimates 12,624 child and adolescent psychiatrists will be needed to meet the demand in 2020, far greater than the projected supply of 8,312. In addition, there is an enormous maldistribution problem, with most child and adolescent psychiatrists located in or near major cities. Kim calculated that the ratio of these specialists per 100,000 youths ranged from 1.32 in West Virginia to 17.53 in Massachusetts, with a mean of 7.51 (Kim, 2003).

In contrast to other mental health professionals, such as nurses, psychologists, social workers, and counselors, the exact number of psychiatrists working in schools is unknown (Lear, 2007). However, it is clear they are not common. A survey of a random sample of 1,447 US schools in 2003 revealed that although more than 80 % of the schools responding to the survey provided some mental health services, only 2 % reported having psychiatrists who delivered services (Teich, Robinson, & Weist, 2007). A 1992 survey done by the American Psychiatric Association probably under-identified the total number of psychiatrists who worked with schools at only 150. Of the 150, 46 % were in private practice, 33 % in academic settings, and 14 % in community mental health centers. Most (83 %) were working with special education personnel. Of note, 18 % were not paid by the schools for this work. Presumably these were volunteers or their work was supported by the institutions that employed them. A 2008 survey by the AACAP of its members showed that approximately 19 % were spending some of their time working in schools, with 5 % spending more than 1 day per week, 5 % working 1/2 to 1 day a week, and 9 % spending less than one half day. Forty-six percent indicated that they saw school referrals/consultations in their offices, while 35 % reported not spending a significant amount of their workweek in schools. There was a 73 % response rate; extrapolating from these percentages, the number doing some on-site work in schools would be about 992. This figure is not far from the number that can be estimated from figures reported by Lear (2007)—if 2 % of all public schools in the USA had 1 psychiatrist consultant, there would be a total of about 1,660 psychiatrists working in public schools in the USA. Since it is common for one consultant to work in more than one school, the figure of 992 is a good approximation.

One reason for the scarcity of child and adolescent psychiatrists is that they are infrequently employed as school consultants. Another reason is that they are viewed as an expensive resource, although this is not the case if they are employed only a few hours a week. Still another reason is that they are not always well equipped to function in the school environment, which is very different from a hospital or clinic. While some training programs emphasize school consultation, there is considerable variability in the quality and quantity of this experience. Although child and adolescent psychiatrists in training are required to have supervised "formal observation and/or consultation experiences in schools" (Accreditation Council for Graduate Medical Education [ACGME], 2009, p. 14), the amount of time devoted to these experiences is not specified, and the experience may be limited to classroom observation only. Furthermore, there is no requirement that trainees must have experience in regular education schools, and programs can and do provide these experiences in special education settings.

Being an Effective School Consultant

To be an effective school consultant, a psychiatrist must have an affinity for working with teams, an ability to listen to and learn from others, and an awareness of the perspectives, roles, and skills of other professionals in the school setting. He or she must be comfortable with shared decision-making and be able to communicate findings and recommendations in ways that are jargon-free, clear, and understandable. Recommendations must be realistic and take into account implications, financial and otherwise, for the school (Dikel, 1999). The DSM terminology, which is second nature to psychiatrists, may not mean much in the school setting, so the psychiatric consultant needs to learn the language of the educators.

Although their training requirements mandate experience with the full range of psychiatric conditions, and familiarity with normal development, during much of the training of child and adolescent psychiatrists, there is exposure to the more severe psychiatric disorders, in inpatient and residential settings. Thus, they are familiar with complex and severe psychopathology. For this reason, child and adolescent psychiatrists tend to be more involved with special education facilities and with special education populations within public school systems. In addition to learning various psychosocial interventions, they are trained to evaluate the effects of metabolic

and brain abnormalities on functioning and to prescribe and monitor psychiatric medications.

Psychiatrists may be called upon to evaluate students who commit or threaten violent acts; often they are requested to determine whether the student is "safe" to return to school. Given the uncertainty involved in assessments of risk for violence, and the legal, social, and ethical issues involved in making such determinations, there are many challenges involved. Murakami and colleagues have outlined the many issues involved in these evaluations, and Rappaport and colleagues have described their approach to these risk assessments (Murakami, Rappaport, & Penn, 2006; Rappaport, 2004), which are comprised of comprehensive psychiatric evaluations, including the entire social context of the threat.

Maximizing the Role

There are ways to maximize the effectiveness of psychiatric school consultants. For example, assessment can be done by the psychiatrist with follow-up treatment by another type of professional (e.g., school counselor, psychologist, social worker), and child psychiatric consultation can be utilized mainly to clarify whether diagnostic and treatment issues are appropriate (Dikel, 1999). Others have suggested that consultants should be less involved in direct services, referring children to outside resources for specialist care when necessary, and focusing on helping schools and personnel to function better (Bostic & Rauch, 1999). Obviously, these recommendations are only realistic when there are sufficient outside resources, which is not the case in many communities.

Telepsychiatry offers another way to extend the school psychiatrist's role (Sargent & Sargent, 2012; Young & Ireson, 2003). Young and colleagues have described good acceptance of this technology in school-based health clinics in rural Kansas staffed by a nurse practitioner and mental health counselor, where a pediatric psychiatry resident provided consultation via a simple technology using a regular telephone line. Families, school clinic staff, and consultants all expressed high levels of satisfaction with telemedicine, and significant cost savings were demonstrated as well. It is of course necessary for the consultant to demonstrate the same ability to collaborate with other professionals and families as would be required by an in-person consultation.

William Dikel, a child and adolescent psychiatrist in Minnesota with extensive experience consulting to school districts about designing programs and services for children with mental health needs in special and regular education, gives examples of how specialty consultation can be helpful. He cites the example of a child with Attention Deficit Hyperactivity Disorder (ADHD), significant family problems, and a history of significant life trauma, whose only treatment is stimulant medication prescribed by a pediatrician who sees him infrequently (Dikel, 1999). The psychiatrist could work with the classroom teacher and the school mental health provider to integrate behavioral strategies into the classroom that work well for students with ADHD and could strategize with the school team and family about how to bridge home and school strategies.

Dikel points out that there are times when second opinions are requested, for example, when school officials do not agree with recommendations made by health or mental health professionals. Also, some situations that initially appear to require school interventions may in fact be due to untreated, undertreated, or inappropriately treated mental health problems. For example, the school program may be asked to provide a one-to-one aide for a student during a lunchroom hour because that student is having significant problems maintaining his or her behavior during that time. The problem, in fact, may be due to medication wearing off prior to the lunchroom hour. If this is the case, consultation with the school and communication to the child's physician can often result in behavior improvement, less stigmatization, and more cost-effective service provision (Dikel, 1999).

Kriechman, Salvador, and Adelsheim (2010) have offered a thoughtful and cogent argument about why child and adolescent psychiatrists can and should do much more than diagnostic evaluations and pharmacological consultations.

Their experience in New Mexico, a state in which the shortage of child and adolescent psychiatrists is particularly acute, has led them to develop unique approaches that allow them to maximize the impact of these specialists, for example, through the use of telepsychiatry. In their programs, child and adolescent psychiatrists function as key members of "nonhierarchical interdisciplinary teams" and provide a range of services ranging from direct patient care to consultation regarding development of community-based systems of care. Foremost among their perspectives is that psychiatrists should be valued and respected not by virtue of their titles and degrees but because of their expertise and skills, as demonstrated in their interactions with families, students, and educators.

Types of Psychiatric School Consultation

Ad Hoc Consultation

Assessment of school functioning is part of the comprehensive psychiatric evaluation of children and adolescents (King, 1995), whether or not the presenting problems are school-related. Typically a psychiatrist who works with children and adolescents in private practice or an agency becomes involved with schools in connection with individual patients seen in his or her office who are experiencing problems in school. This involvement may take the form of oral and or written communication with the school about the child, including requesting of information from the school to assist in an evaluation. This aspect of assessment usually involves speaking with teachers and may also include obtaining written reports and the use of checklists or rating scales. Classroom observation can also provide valuable information and may be incorporated into the assessment. Such an assessment can be done by a solo practitioner on an ad hoc basis. While there are many constraints to this kind of assessment—typically school visits, school observation, and time spent communicating with the school are time-consuming and not reimbursable by third-party payers—it is probably the most frequent kind of interaction between psychiatrists and schools.

Following the evaluation, the psychiatrist may make recommendations to the school. The interaction with the school and giving of feedback to the school constitute a basic kind of "consultation," but not what is usually meant by school consultation. However, the relationships established by these activities can lead to other more formalized consultative roles. This, the most basic and traditional model, psychiatric evaluations of referred students, is the most common way in which psychiatrists work in schools. The importance of this work should not be minimized, as it can have an impact not only on the individual child but on the school. This is especially true if the psychiatrist takes the time to understand the culture and milieu of the school and to engage the school in work around problem-solving with respect to the individual student.

Sometimes ad hoc psychiatric consultation to schools develops out of a crisis. Eth and colleagues (1985) described how a team of mental health professionals that included a child psychiatrist provided group counseling to students and assistance to teachers and other school staff following an episode of family violence that involved two students in a school. The intervention began with the psychiatric liaison service during the hospitalization of the two children and continued with their outpatient treatment in a clinic and the team's intervention in the school. More recently, Shashank Joshi, a child and adolescent psychiatrist at Stanford University, has worked with Project Safety Net (http://www.psnpaloalto.com), a collaboration between community agencies and the university, to implement suicide prevention in schools. This collaboration developed after the suicides of five high school students in an 8-month period in 2009 by high school students in the Palo Alto, California area (Braun & Ho, 2011). Similarly, psychiatrist Paul Fink has described his role as a volunteer in the schools of Philadelphia (1996). He began working in this way after the city was shocked by the murder of a student in a subway station. Subsequently, he became involved in a consortium of community leaders who worked together to develop programs to reduce violence in the city, a

group that continues into the present (www.philly-blueprint.com).

Informal Consultation Based on Relationships with Schools

A more structured, but still informal, form of consultation takes place when a psychiatrist develops a relationship with a school and sees individual students referred by the school, meets with school staff about their concerns about individual students, or provides assistance to the school in obtaining services, dealing with outside agencies, and so forth. Typically nonpublic schools will engage a psychiatrist in the community with whom they have developed a relationship, who sees children and families referred by the school. Such individuals do not normally receive payment from the school but benefit from receiving referrals. A psychiatrist in this role may be seen as a "consultant" by the school, although the relationship is informal and based on trust and respect for the opinions of the consultant, and the psychiatrist is hired by the families rather than by the school.

Formal and Contractual Consultation

Still another kind of consultation takes place when the school contracts with a psychiatrist to provide services to students and or staff. Most often this involves part-time employment, but the psychiatrist may be a full-time or regular employee, most likely in the case of special day or residential schools, or may be under contract and paid per consultation or per hour. Because of the IDEA requirements for documentation that students receiving special education services qualify for these services, schools with students receiving special education services, or special education schools, often employ mental health specialists, including psychiatrists, who evaluate students already receiving these services as well as those being considered for such services. These specialists typically provide guidance and assistance to the school, participate in the development of the Individual Education Plan (IEP), and work as part of a mental health team in the school. The arrangements are usually worked out on an individual basis between the agency or an individual and a school.

Part of Organized School Health and Mental Health Programs

As organized school-based mental health services began to develop beginning in the 1980s, psychiatrists became involved in these services, both in administration and program development and direct service provision (Flaherty, Weist, & Warner, 1996). For example, in Baltimore, what came to be termed "expanded school mental health" (see Weist, 1997) arose both out of health clinics in some high schools which added a mental health component, as well as the placement of mental health clinicians (postdoctoral psychology fellows and master's level social workers with child and adolescent psychiatrists providing on-site diagnostic and psychopharmacological consultations). Eventually, the ESMH programs became training sites for second-year child and adolescent psychiatry residents. While these psychiatrists and psychiatrists-in-training provided traditional consultation services, they also had the opportunity to observe children in the classroom, take part in interdisciplinary meetings, and provide case-oriented consultation to the other clinicians (see below for further information on the ESMH program).

Systems Consultation

Work with school systems was long seen as the "holy grail" of school consultation, as it carries the potential to change not only the persons with whom one has direct involvement but entire systems. Caplan (1970) defined this level as administrative consultation, which he conceptualized as either program-centered (in which the consultant is called in to study and provide recommendations for developing a new program or improving organizational functioning) or consultee-centered

(in which a consultant works with members of an administrative staff on a long-term basis to improve their functioning).

However, not many school systems hire child and adolescent psychiatrists who function only as consultants to administrators. This has to do in part with the scarcity of these professionals and the considerable unmet need for them to provide direct services to children. Nonetheless, there are examples of such consultation. Jellinek (1990) described an ongoing consultant role for 3 hours a week in an affluent suburban school district in the Boston area. He was able to negotiate a salary as a consultant to a school district with responsibilities that involved primarily working with school officials, rather than providing direct services. Through Jellinek's description of what he did, the reader becomes aware that the use of the power of the physician role was an important aspect of his effectiveness. However, even in this role, he occasionally became directly involved with students and/or their families, for example, when the parents and the school recognized the severity of a child's problems and need for more specialized services or where he met with high-achieving physician parents to reduce the amount of pressure they were placing on their daughter or son to excel. More recently, Adelsheim in New Mexico played a leadership role in redesigning the state's system of care as a state mental health consultant, where he worked collaboratively with leaders of other state agencies. Similarly, Dikel, a child and adolescent psychiatrist in Minnesota, has served as a consultant to school districts to help them redesign programs (http://web.me.com/dikel002).

Models that Utilize Psychiatrists as Consultants

The University of Maryland Expanded School Mental Health Programs

The school mental health programs developed at the University of Maryland, among the earliest in the USA, grew out of preexisting arrangement whereby staff from the university-affiliated community mental health center's child and adolescent teams each spent one half day a week in a school in the center's service areas. This arrangement was initiated by a child and adolescent psychiatrist who directed children's services at the Outpatient Mental Health Center and preexisted the development in the 1989 of formal programs in the schools funded by the State of Maryland and Baltimore City agencies (Flaherty & Weist, 1999). All of the 27 schools served by these programs have psychiatric consultation built into their treatment framework. In these programs, psychiatrists on the faculty of the University of Maryland provide supervision to senior child and adolescent psychiatry residents who each spend one half day a week in the schools. These trainee psychiatrists evaluate students after they are seen by the school-based staff (e.g., licensed clinical social workers, psychology associates, postdoctoral fellows), consult with the school clinician and school staff, and provide medication management for selected patients. They also participate in school team meetings and meet with school administrators, parents, and teachers about individual children and general mental health issues. In addition, the residents and faculty provide backup on-call services when crises arise and help coordinate with the hospital's emergency department and inpatient facilities if needed. In addition to learning about schools in which they work, the trainees also have formal seminars in school consultation and are introduced to the history and culture of Baltimore, as well as issues related to gangs, violence, and substance abuse as they affect the schools.

Howard County School-Based Mental Health Service

In the 1970s, Ulku Ulgur, a child and adolescent psychiatrist working in Maryland's Howard County, an affluent district of the state of Maryland, began visiting schools and meeting with the schools' support teams (counselors, psychologists, special education teachers, speech pathologists, and administrators) to discuss individual students whom he was seeing in his private office.

Out of these efforts, an organized system of mental health care in the Howard County School System developed (Ulgur, 2008). As he describes it, the primary goal of the team was to:

> serve a large population of children with varying kinds and degrees of disability. The emphasis was shifted from severely disturbed children to those able to remain in regular classes with the support of the program. The Interdisciplinary Team was composed of a coordinator, school psychologist, speech and language clinician, nurse practitioner, and three part-time consultants: a pediatrician, child psychiatrist and optician (Ulgur, 2008, p. 3).

During the early stages of school consultations, the work of the psychiatrist was limited to a psychiatric evaluation of the individual child with mental health problems. However, the role and functions of the psychiatric consultant evolved to encompass a wide range of school-based psychiatric services. The consultation program eventually expanded to encompass four child and adolescent psychiatrists working with two school systems in Howard County. The services include:

1. Identifying and assisting emotionally challenged students with the primary goal of minimizing the impact of their emotional problems on their academic achievement and reducing adjustment problems upon their return to regular programs
2. Working collaboratively with special education teams in preparation of emotionally challenged students for their transition to a lesser restrictive, educational environment and identifying students with more complex emotional problems who may need intensified therapeutic and educational interventions
3. Assisting in staff development activities for school personnel, including teachers, aides, therapists, school psychologists, and administrators who work with these students
4. Maximizing the benefit of psychiatric interventions by community-based mental health providers by initiating and conducting ongoing communications and consultations with pediatricians/psychiatrists, therapists, and other involved agencies
5. Guiding and assisting the school staff in developing effective crisis management and intervention strategies and customizing their approach according to the specific needs of students on a continuous basis
6. Developing and participating in group and individual counseling sessions for students
7. Helping the parents to understand the nature of their child's handicapping conditions and assisting their efforts in seeking appropriate therapeutic interventions

Consultation in School-Based Primary Care Settings: Cambridge Health Alliance Teen Health Centers

Child and adolescent psychiatrists at Cambridge Health Alliance (CHA) in Cambridge, Massachusetts, a consortium of hospitals and clinics, are involved in a variety of school consultative experiences. The CHA, a Harvard Medical School affiliate, operates four Teen Health Centers. These programs are noteworthy for their integration of mental health and physical health and the availability of the staff, including the child psychiatrists, to do emergency evaluations and support students in crisis when needed. Nancy Rappaport, a child and adolescent psychiatrist who serves as director of school-based programs at CHA, has worked since 1995 as a psychiatric consultant at the Teen Health Center at Cambridge Rindge and Latin school, a large multicultural urban high school with a significant minority and immigrant population, and has written extensively about her experiences (Rappaport, 2001a, 2001b). This and the other teen health centers provide a range of primary health care services, delivered by an adolescent medicine specialist and an advanced practice nurse. Psychiatrists, including child and adolescent psychiatry residents, work directly with students and also interact intensively with school staff to help the school maintain students whose lives are in significant turmoil (Rajan & Rappaport, 2012).

In addition to her role at the centers, Rappaport and her colleagues provide consultation to special education regarding students with complex and difficult problems and perform what she terms "safety assessments," which are the violence risk assessments described earlier. A significant part

of the psychiatrists' roles in these programs is helping schools, students, and families to obtain access to care, whether it be emergency departments or psychiatric inpatient facilities. They often serve as mediators between educators and clinicians and can help resolve disagreements over recommendations for special services or more restrictive placements. They can communicate with other physicians regarding medical issues. In addition, they are occasionally involved in crises involving school staff and administrators. Rappaport points out that the effectiveness of her role is related to her long-standing (18-year) relationship with the schools and the level of mutual trust and respect that has developed.

University of New Mexico: Statewide Responsibilities

Building on the tradition begun by school psychiatry pioneer, Irving Berlin, Adelsheim and colleagues at the University of New Mexico have advocated strongly for an expanded role for child and adolescent psychiatrists that includes a system of care approach involving school-based services. Adelsheim, working as State Director of School Mental Health in New Mexico, a largely rural and sparsely populated state with a significant poor and Native American population, played an important role in helping the state reconfigure its health care services so that health and mental health services were delivered in schools. Beginning in the 1990s with four pilot programs sponsored by the departments of health and of children, youth, and families, New Mexico developed a statewide system of school-community collaboration for children's mental health. Part of this program involves building capacity among primary care providers in sparsely populated areas to identify and treat children's mental health issues (Adelsheim, Carrillo, & Coletta, 2001; Kriechman, Salvador, & Adelsheim, 2010). Telepsychiatry is used extensively and effectively (the state even has a Telehealth Commission). Psychiatrists use a strengths-based, nonhierarchical approach, characterized by "therapeutic conversations" with families and educators, and trainees are taught this approach. It is noteworthy that the psychiatrists who serve in these roles are usually involved in a variety of roles. In addition to providing consultation to primary care providers, they see children referred for psychopharmacologic and diagnostic consultations, thus functioning on multiple levels. Kriechman and colleagues stress the need for the experience of the child and adolescent psychiatry residents to be more than "just one more typical medication clinic in a more distant location" (p. 153).

Dallas County Independent School District's Youth and Family Centers

Pearson and colleagues have described how school-based mental health centers, led by a child and adolescent psychiatrist who spent 4 hours a week in each clinic, began in 1993 at the behest of principals in two Dallas County schools and subsequently rapidly developed into a system of health and mental clinics throughout the school district (Hall, 2002; Jennings, Pearson, & Harris, 2000). The centers have incorporated some aspects of full-service schools (Dryfoos, 1994) and developed from a partnership between Parkland Hospital and the school districts. In 2011 there were 11 of these clinics located in various schools in Dallas County; each clinic serves not only the school in which it is located but other nearby schools. These clinics provide primary care for children who do not have outside doctors and include a mental health service component and pharmacy services.

The psychiatrists working in the clinics provide a full range of services, including evaluation and individual and family therapy, in addition to medication management, as members of an interdisciplinary team. In addition, child and adolescent psychiatry residents are assigned to the clinics as part of their clinical training. Pearson and colleagues (1998) have pointed out that although there is a need for consultation to school personnel, the overwhelming need is for direct psychiatric services to children and families. However, inasmuch as much of the psychiatrists' work, including the assessments of families and children, is done

together with the team, this model provides rich opportunities for mutual sharing of expertise and collaborative learning among the staff involved. Furthermore, families are included in the team meetings, promoting an atmosphere of shared responsibility for treatment planning.

Massachusetts General Hospital School Psychiatry Program

Under the direction of child and adolescent psychiatrist Jeffrey Bostic, this program is in an academic teaching hospital affiliated with Harvard University and has a large faculty and staff including four child and adolescent psychiatrists. The program staff provides consultation to public, private, and charter schools in the greater Boston area and beyond and has an extensive website (schoolpsychiatry.org) with information for parents, teachers, and clinicians about psychiatric disorders and treatment, as well as screening instruments and other tools designed to be used by educators and clinicians for assessment. The website also includes a complete curriculum for high school teachers and mental health professionals to use in teaching emotional self-regulation skills to students. The program staff works regularly in public, private, and charter schools in the greater Boston area and provides specialized support to schools outside this region. The program staff provides direct consultation services to schools, on-site teaching to psychiatrists-in-training, support services for schools, and educational materials on school consultation. After a period of observation in schools, child and adolescent psychiatry residents work directly with families and children and also function as members of multidisciplinary teams, participating in the development of IEPs, and learn about prevention and health promotion in the school setting.

Discussion

Three things are noteworthy about the models of psychiatric consultation described in this chapter: (1) many of them are connected with medical schools in public universities or with city hospitals, (2) they developed out of preexisting relationships between the consultants and the schools, and (3) they developed over time, building on relationships among key individuals with a commitment to social change and a vision for how it could be accomplished. The commitment of the public university or hospital to the community is an important factor in providing the institutional support for the programs to develop (Flaherty, 1991). In addition, the availability of training programs in child and adolescent psychiatry and the requirement for school consultation experience facilitates the availability of faculty with interests and expertise in school consultation and trainees who are available to serve as consultants under supervision.

As described in this chapter, child and adolescent psychiatric consultation to schools can take many forms. Psychiatrists who work in schools often operate on multiple levels, and their work often cannot easily be categorized by the traditional conceptualizations of consultation. Because of their backgrounds, they will likely always be used to evaluate complex and difficult problems and to provide consultation regarding psychopharmacological treatment. A psychiatrist who works only a few hours a week in a school can have a major impact through case-oriented consultation to educational, health, and mental health staff. Psychiatric consultants can also be helpful in problem-solving with regard to challenges faced by schools and families related to school behavior and school emotional climate. They can also work effectively to help design and improve systems of care that link schools with communities to improve outcomes for students with mental health needs.

As can be seen from the examples, models of psychiatric school consultation vary widely. This is a necessity, given that they must be adapted to local needs and resources. A program in a school in an area with many child and adolescent psychiatrists, and where families can access care, can refer students out for more comprehensive evaluation and treatment. A program in a rural area cannot refer students to other psychiatrists for care, when there are no other psychiatrists. Further, a program in a community with a low income and minority population has to take into

account that many families are not able to access health care on their own.

Regardless of the consultant's role, particular competencies are required to be an effective school psychiatrist. Foremost to the consultant's success is the ability to form strong relationships with teachers, administrators, and other mental health professionals who work in schools. Bostic and Rappaport, both former teachers, stress the importance of the consultant's ability to understand the pressures and anxieties of the school staff (Bostic & Rauch, 1999) (Rappaport, 2001a, 2001b). They warn that the psychiatrist must listen carefully for underlying concerns beneath the stated consultation questions, and not respond prematurely with solutions, but engage in mutual explorations of problems and jointly find solutions.

Psychiatrists who work in schools today, whatever their responsibilities, should be able to function as members of interdisciplinary teams, where families are included as valued participants, and each member of the team brings his or her own expertise by virtue of training and or experience. Most importantly, they must be skilled in engaging in collaborative work with the other members of the team.

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Part V

Screening and Early Identification

School-Based Screening for Mental Health in Early Childhood

Melissa R. Dvorsky, Erin Girio-Herrera, and Julie Sarno Owens

Epidemiological data indicate that mental health problems affect approximately 15–25 % of school-aged children in the United States (e.g., Roberts, Attkisson, & Rosenblatt, 1998); yet only 20 % of youth in need receive mental health services (e.g., Mills et al., 2006). Without appropriate screening and early identification procedures, children's mental health problems are often left untreated. This is concerning, given that unmet mental health needs often lead to debilitating long-term outcomes such as below grade level achievement, school absenteeism, suspensions or expulsions, low graduation rates, and unemployment (Wagner, Kutash, Duchnowskil, Epstein, & Sumi, 2005; Zigmond, 2006). Additionally, when youth with mental health problems do not receive appropriate treatment, they are at elevated risk for later conduct problems, delinquency, and severe mental health problems (Walker & Sprague, 1999). Thus, there is a significant need for evidence-based screening and early identification practices in schools.

Challenges with Traditional Approaches to Identification

Unfortunately, traditional methods of identifying youth with mental health problems are insufficient and even problematic. For example, many schools rely on teacher nominations through a referral process. This process can result in under referral and late referrals (Albers, Glover, & Kratochwill, 2007), as it often "identifies" only high-risk or severe students (Cash & Nealis, 2004). Such high-risk students represent those who are already exhibiting failure or severe impairment, rather than those with emerging problems for whom early intervention may prevent the advent of extreme negative outcomes. This nonstandardized referral approach is subject to bias due to varying behavioral and academic expectations and differing thresholds in tolerance across teachers (Lloyd, Kauffman, Landrum, & Roe, 1991). Furthermore, teachers do not typically receive adequate training in identifying and referring mental health problems in students (Tilly, 2008). Given the limitations of traditional teacher referral process, systematic, universal problem-solving assessment approaches have been recommended (Schwanz & Barbour, 2005; Tilly, 2008).

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Call for Systematic School Mental Health Screening

The critical need to address children's mental health problems, as well as schools' unmatched access to youth, has prompted national recommendations for improving school mental health (SMH) programs (President's New Freedom Commission on Mental Health, 2003; Weist, Rubin, Moore, Adelsheim, & Wrobel, 2007). One component of comprehensive and effective SMH programming is universal screening. The goal of universal screening is to identify childhood problems *before* the behaviors exceed the threshold for a parent or teacher referral for services (Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007). Universal screening, when paired with effective early intervention, can decrease the propensity for future academic difficulties and related problems (Albers et al., 2007; Lane & Menzies, 2003).

Benefits of Universal Screening for Mental Health Problems

We highlight three benefits of universal screening that are evident in the literature. First, a universal approach assesses *all* students, thereby reducing the number of at-risk students who may be overlooked as a function of teacher bias or personal thresholds. There is evidence that universal screening approaches within the school setting can result in psychometrically sound detection of mental health problems in early childhood (e.g., Essex et al., 2009). Essex and colleagues (2009) showed that the detection of incoming kindergarteners who displayed both internalizing and externalizing symptomatology strongly predicted impairment in 5th grade across a number of domains (academic, social, and physical health problems; use of school-based services). This provides evidence for universal screening as a valuable tool for very early identification of students who eventually become impaired and remain in need of support. Universal screening, through the use of strong psychometric measures, is an efficient process of detecting children earlier and providing support sooner rather than waiting until impairment occurs and or at later time points in a child's life. Improved efficiency occurs as school staff can use screening results immediately to streamline decision-making regarding which behaviors should be targeted for further assessment or early intervention and determine the impact of a prevention program (Dowdy, Ritchey, & Kamphaus, 2010). Increased efficiency in these areas can lead to prevention and intervention services sooner, thus reducing the likelihood of future problems (Albers et al., 2007).

Second, universal screening provides a baseline against which future student monitoring can be benchmarked. If the infrastructure for screening is sustained over time, risk factors that are identified early (e.g., preschool or elementary school) by school staff can continue to be monitored and addressed over time and during critical transitions (e.g., transition to middle or high school). Research teams and school districts are beginning to use screening data to monitor both (1) overall risk for behavior problems at the school level and (2) risk within individual students (e.g., Lane, Oakes, & Menzies, 2010).

Third, universal screening that results in early identification of problems provides a pathway to early intervention, which reduces costs, as treatment of mild problems is often less intensive and less expensive than treatment for severe problems (Dowdy et al., 2010; Lane et al., 2010). To date, two studies have evaluated the cost of school-based mental health screening programs (Flaherty, Weist, & Warner, 1996; Kuo, Vander Stoep, McCauley, & Kernic, 2009). Most recently, one estimated screening costs to be $8.88–$13.64 per enrolled student, depending on the prevalence of positive screens in a school (Kuo et al., 2009). Cost-effectiveness (i.e., calculated by assessing overall costs of screening per successful linkage to services dollars) was determined to be $416.90 (when 5 % screened positive) and $106.09 (20 % screened positive) per successful student linkage to supportive services. This study also indicated that costs may differ depending on who is available to conduct the screen, as a savings of $1.85 per student would

occur if teachers rather than university staff conduct this task. However, additional studies demonstrating the advantages, outcomes, and cost-effectiveness associated with early screening early are sorely needed.

Despite initial research demonstrating the benefits and cost-effectiveness of school-based screening (Kuo et al., 2009), proactive universal screening for mental health is not yet considered routine practice. In fact, only 2 % of schools nationwide conduct universal screening for emotional or behavioral difficulties (Romer & McIntosh, 2005). Further, although research has documented the reliability and validity of several screening tools, very few studies provide information about the feasibility and acceptability of universal screening procedures, the infrastructure needed to sustain such procedures, or the most appropriate follow-up approach for effective services (Glover & Albers, 2007; Levitt, Saka, Romanelli, & Hoagwood, 2007). Thus, substantial research is needed along these fronts.

Universal screening has been recommended for a variety of domains, including early literacy, health (e.g., vision and hearing), and mental health (President's New Freedom Commission on Mental Health, 2003), as well as for youth of all ages. In this chapter, we focus on screening *for mental health problems in early childhood* (i.e., prior to middle school). As researchers and school mental health providers work together to develop and integrate universal screening within schools, the responsibilities involved in such a task must be carefully considered. In this chapter, we guide readers through an evidence-based framework for responding to national recommendations for screening, highlighting critical issues at each phase in the process. This framework is presented in three phases (planning, tool selection, and service linkages), synthesizing recommendations from previous key resources (Dowdy, Furlong, Eklund, Saeki, & Ritchey, 2010; Glover & Albers, 2007; Kettler & Feeney-Kettler, 2011; Levitt et al., 2007; Weist et al., 2007), and research published in the last 5 years. Lastly, because research on screening is in its infancy, we close by summarizing emerging areas of research in universal school-based mental health screening and critical issues for future inquiry.

Framework for Implementing a Universal Screening Program

Table 1 reviews an outline of the three phases of the framework for implementing a universal screening program as well as a checklist of steps to consider during the three phases. Below we offer more detail about some of these steps.

Table 1 Considerations for implementing a universal screening program in schools

Phase 1: Planning
Secure district and school-level administrative support for screening
Identify resources and currently available services available at school or in the community for supporting both the screening and students identified via *screening*
Identify key stakeholders from school, community, university, and parents
Establish a screening "planning and implementation team"
Assign responsibilities for individuals on the team
Work out logistics such as infrastructure supports needed and time considerations
Develop a budget for screening materials and staff
Create a timeline for executing the screening program
Conduct professional development training related to identifying mental health
Establish goals and purpose for screening
What is the purpose of the screening?
What are the expected or desired outcomes?
What is the school and community's comfort level with undertaking this task?
In what ways will screening benefit students, staff, school, and community?
Phase 2: Selecting a universal screening tool
Evaluate currently available tools and determine a tool that best matches your screening rationale and resources
Phase 3: Creating links for follow-up practice
What will be done with the information obtained from the screening and how will this be shared with students, families, and school staff?
How will the screening data be analyzed and summarized to facilitate open communication?
Determine a system process for screening results to inform interventions

Note. This table provides a checklist of steps to consider before instating a screening program and is adapted from considerations made from Dowdy et al. (2010) and Lane, Oakes, and Menzies (2010)

Phase 1: Planning

Although schools provide a logical and natural setting for screening, there are several responsibilities and challenges to address during the planning process. These include assessing resources to support the screening process and services that follow, obtaining key stakeholder buy-in, determining the purposes of the screening, assessing whether parental consent and student assent are required, calculating costs associated with materials and personnel, and training all those involved in the screening program (Weist et al., 2007).

Creating a Resource Map

An important step in the planning process is to create a map of current resources in the school or local community that could support the screening process and/or the students identified via screening. It is recommended that during the resource mapping process, school districts initiate or further develop existing collaborative relationships with local universities or community agencies that serve youth such as mental health clinics, child welfare, law enforcement, substance abuse facilities, or other specialty networks (Weist et al., 2007). Of particular importance is that districts and collaborating community agencies agree on shared responsibilities related to liability concerns, referral mechanisms, and service coordination. This mapping process will also help school districts identify professionals who should participate on the planning and implementation team. In addition to professionals from universities and child service agencies, local entrepreneurs in business or technology may be useful members of the planning team, as they may bring unique resources (e.g., computers, software, websites, data analyses, or marketing tools) to the screening and subsequent referral and treatment processes.

Developing a Team

As described above, potential team members are those who represent meaningful sectors within the school or community or those who offer access to a unique skill or resource. Once these professionals have been identified, they should be invited to become members of a collaborative planning and implementation team. Researchers (Dowdy et al., 2010; Leff, Costigan, & Power, 2004; Owens, Andrews, Collins, Griffeth, & Mahoney, 2011) recommend that the team operate from a participatory, partnership-based framework. In such a framework, the leader of the team establishes a climate in which all members (a) feel comfortable sharing their opinions, (b) take ownership of the process, (c) jointly identify problems and solutions, and (d) share in the decision-making process to ensure outcomes are culturally appropriate and meaningful to all. Over time, this team will collaboratively work through each of the phases below. With each step, the team should strive to make data-driven decisions and implement procedures supported by empirical research. To date, much of the empirical research about universal screening procedures has been conducted by university-based research teams. To ensure that future findings are grounded in the needs and realities of school communities (i.e., are practical, relevant, affordable, and effective in identifying at-risk youth), universal screening data should be collected in the context of participatory partnership-based frameworks (Dowdy et al., 2010).

Determining the Purpose of the Screening

As outlined in Table 1, one of the primary tasks of the planning team is to articulate the purpose of the screening and the desired outcomes so that all subsequent tasks can be focused on meeting these goals. Presumably, the team has been formed because of a need or a concern that has emerged within the school community. For example, some schools may be concerned about disruptive student behavior and would like to target this as a way to distribute challenging children evenly across classrooms. Other schools may have concerns about the impact of underdeveloped social, emotional, or adaptive skills at kindergarten entry and would like to identify children who may benefit from close monitoring or early intervention services. The domain of concern will determine the goals of the screening, which will, in turn, determine the outcomes of

Phase 2 (see Tool Selection below). In addition, the domain of interest also influences the team's decisions about who will complete the screening instruments, the training these informants will need, when the instruments will be completed, and what resources will be needed to successfully implement the screening program and integrate it with other services.

Selecting Informants

In the context of comprehensive evaluations for children's mental health problems, evidence-based practice guidelines (e.g., Pelham, Fabiano, & Massetti, 2005; Silverman & Ollendick, 2005) recommend the use of multiple informants (i.e., teacher-, parent-, and self-report). However, in the context of universal screening, the evidence for single versus multiple informants is mixed. Some researchers recommend that teachers be used as the primary informants (Dowdy et al., 2010; Kamphaus, DiStefano, Dowdy, Eklund, & Dunn, 2010). For example, some studies indicate that parent ratings are less predictive of future outcomes than teacher ratings (Kamphaus et al., 2007; Girio-Herrera, Dvorsky, & Owens, 2012) at the preschool, elementary, and middle school ages. However, because teachers have more influence than parents on some of the outcomes being predicted (e.g., grades, test scores), it is possible that the higher predictive validity estimates for teachers are a function of shared rater variance. Namely, the higher correlations between teacher rating scales later grades may not reflect greater validity; rather it reflects the effect of the teacher's perception of the child on both indicators. However, studies that use teacher ratings from one academic year to predict academic performance in a future academic year (Essex et al., 2009) provide support for the utility of teacher ratings.

In contrast, other research has shown that each informant provides unique information that is superior to that provided by a single informant (e.g., Feil, Severson, & Walker, 1995; Hill, Lochman, Coie, Greenberg, & The Conduct Problems Prevention Research Group, 2004). This may be particularly true if school districts are interested in capturing risk status prior to kindergarten entry (i.e., parents can complete screening measures at kindergarten registration before the teacher gets to know the child) (Girio, Dvorsky, & Owens, 2012). Utilizing multiple informants may also facilitate communication between parents and teachers (Girio, 2010), which may lead to better monitoring of problematic behavior and possibly higher service initiation among parents. Thus, until further data are available to provide more conclusive guidance, it is recommended that the informants used match the overall goals of the screening program and available resources.

Training Staff Involved

Depending on the scope of the screening program and instrument administered (described below), infrastructure demands may be minimal to extensive and directly impact the feasibility of implementation. Although school personnel (e.g., educators, psychologists, counselors) may be available to assist in coordinating and/or implementing the screening system, additional personnel may be needed for administering, interpreting, and compiling the screening data.

Although we are unaware of any studies that have empirically examined the role of staff training on the effectiveness of universal screening programs, our own experience with implementing screening programs suggests that the planning team should give consideration to the following training needs: (a) training in children's mental health and factors that contribute to mental health problems to improve the informants' understanding of the purpose and content of the screening (Severson et al., 2007), (b) training on implementation procedures so that screening procedures are consistent across all informants (or all school buildings), (c) training for the staff member who is responsible for scoring and summarizing the data, (d) training on how school staff can speak to parents about the results of the screening, and (e) training for the collaborative planning and implementation team to facilitate referrals and services following the screening. It is important to consider how local community resources could be leveraged to assist with these training needs. For example, professionals from the local mental health agency could provide a primer on children's mental health and signs of at-risk status.

University partners may offer assistance with data management, interpretation, and analysis. Specially, it is recommended that a school's collaborative planning and implementation team not only involve leaders within the school and district but integrate community mental health and university partners with each playing a key role in executing the training steps mentioned above.

Addressing Logistical Concerns

The planning team is also tasked with pragmatic considerations such as timing, frequency, appropriate setting within the school for conducting the screening, and cost for screening implementation. With regard to timing, critical transitions in children's educational development (e.g., kindergarten entry, transition to middle school) represent a natural time point for universal screening. Alternatively, if school districts are interested in change over time, the planning team may choose to conduct the screening in the fall and in the spring of a given year or on a yearly basis across years. Clearly the goals of the screening program would dictate whether the screening will occur at a single entry point, annually, or more than once in a given year. The planning team must also consider the location where screening will occur. For example, if parents are informants, will they complete the screening form along with other kindergarten registration forms? Will they be completed at the school or mailed to parents? Is a confidential space needed for parent completion of the measure? Depending on the timing of administration and number of informants, the team may decide to obtain parent or youth report screening during naturally occurring events within the context of the school (e.g., parent nights, kindergarten registration; Girio, 2010).

Phase 2: Selecting a Screening Tool

When selecting a tool, planning teams must consider the domain of interest, psychometric adequacy, feasibility, acceptability, and overall utility of the screening tool (Girio-Herrera et al., 2012). We will briefly discuss each, as effective mental health screening tools are characterized as appropriate to the context, accurate in detecting problems, sensitive to at-risk behaviors, accessible, feasible, and moderately inexpensive (Glover & Albers, 2007; Kettler & Feeney-Kettler, 2011). Thus, these overlapping concepts highlighted by both teams in choosing an instrument are worth considering. That is, mental health screening tools should provide evidence of (1) sufficient psychometric properties, (2) appropriate fit to school context, (3) acceptability, and (4) treatment utility by connecting to follow-up services including existing SMH programming.

Domain of Interest

With regard to the domain of interest, universal screening tools are typically either broad (assessing multiple domains) or specific (assessing only one domain). Examples of broad tools are the Behavior and Emotional Screening System (BESS; Kamphaus & Reynolds, 2007) and the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). An example of a specific tool is the Screen for Childhood Anxiety Related Emotional Disorders (SCARED; Birmaher et al., 1999). Because a full review of all screening tools is beyond the scope of this chapter, readers are referred to the review of over 95 mental health screening tools conducted by the Northern California Training Academy in 2008 (http://humanservices.ucdavis.edu/Academy/pdf/104056-MentalHealthLR.pdf).

When deciding whether to use a broad or specific tool, it is important to note that narrowing the screening to one mental health disorder or focal domain to the exclusion of other domains may reduce detection of at-risk children. Najman and colleagues (2007) found that using the total problems score from the Child Behavior Checklist (CBCL; Achenbauch & Edelbrock,ck, 1991) was more predictive of children's anxiety and depression problems than the narrower, internalizing subscale of the CBCL. Alternatively, a broadly focused screening approach may assess specific problems of the individual child and may require follow-up assessment to determine specific areas that warrant intervention. As such, it is recommended that the planning team prioritize the domain of interest or concern.

Psychometric Adequacy

The selection of screening measures requires attention and adherence to psychometric standards. Psychometric standards reveal the reliability and validity of the measure. Reliability refers to consistency in measurement within a given population. With regard to screening, both internal reliability and test-retest reliability are important. Validity refers to accuracy in measuring the intended construct. With regard to screening, predictive validity is particularly important as the instruments must adequately distinguish between youth with and without risk for the mental health problem of interest (Kettler & Feeney-Kettler, 2011; Levitt et al., 2007).

Reliability

The reliability of a screening tool can be determined through indices such as internal consistency and test-retest reliability. The internal consistency of a screening tool is often reported in the form of a coefficient alpha, an indicator of how well the items "hang together" or how well each item on the subscale captures the domain assessed (Salvia & Ysseldyke, 2004). Test-retest reliability is an indicator of the measure's demonstrated consistency within an individual's ratings over time. This indicator is important to ensuring that any change detected in a score is a function of other factors (e.g., response to treatment) and not a function of random test variability. Coefficient alpha and test-retest reliability values of .75 to .80 are recommended (Glover & Albers, 2007).

Predictive Validity

Predictive validity is one of the most significant indicators of technical adequacy for a screening instrument (Glover & Albers, 2007). An effective screening tool must be able to distinguish between those with and without the behavior or difficulty. *Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV)* are four common statistical indices of accuracy also referred to as conditional probability indices in screening or assessment methods (e.g., Glover & Albers). Glover and Albers recommend acceptable values to be .75 to .80 across sensitivity, specificity, and positive predictive values. Each of these indices can be calculated onto a matrix using values from a criterion-screening instrument. There are four possible outcomes of the matrix indicating how accurate the measure was at detecting at-risk status: true positives, false positives, true negatives, and false negatives. *Sensitivity* refers to the portion of students correctly identified as at risk and are truly at risk. This is calculated a ratio of the number of individuals correctly identified by the amount the screening measure detected (i.e., true positives divided by the total positives). *Specificity* represents the proportion of students correctly identified as not at risk that truly are not at risk. It is calculated by a ratio of the number of individuals correctly not identified by the amount the screening measure detected not at risk (i.e., false negatives divided by the total negatives). *Positive predictive value* refers to the probability of being of at risk given a high score on the screening measure. *Negative predictive value* refers to the probability of being typical given a low score on the screening measures.

It is critical to examine all four indices together as they are statistically related in a sample. For example, developmental characteristics that raise one index (e.g., sensitivity) are likely to reduce another (e.g., specificity; Kettler, 2011). Schools are strongly encouraged to evaluate a measure for adequate ranges on these indices based on their intention to minimize false positives (those incorrectly identified as at risk) versus false negatives (those who go undetected or incorrectly identified as not at risk). In recent years, several tools have been developed that adhere to sound psychometric standards (e.g., Kamphaus & Reynolds, 2007).

Appropriate Fit to Context

When selecting a tool, developmental and contextual variables of the students, the grade level, or the school should be considered, as risk for particular mental health problems can vary by developmental stage and context (Loeber & Farrington, 1998). For example, identifying risk for mental health problems in preschool or early elementary school-aged children can be difficult due to normative variability in the achievement

of social, emotional, and behavioral milestones in early childhood. It is often challenging to decipher between normative and transient misbehavior and behaviors that are predictive of enduring problems. However, research has shown that children typically do not "outgrow" problems (Ashford, Smit, van Lier, Cuipers, & Koot, 2008) and longitudinal studies have identified the behaviors that lead to longer-term mental health problems that are detrimental to the individual, family, and society (e.g., Essex et al., 2009). For instance, Essex and colleagues found that youth with recurring and comorbid (internalizing and externalizing) problems at school entry were likely to experience pervasive impairment in mental health problems by adolescence. Schools should choose age-appropriate measures normative samples for that measure.

Acceptability

Because most of the early research on universal screening was conducted by university-based research teams, historically, there has greater attention given to examining the psychometric properties of screeners than to other key aspects such as treatment utility, cost, feasibility, acceptability, availability of appropriate accommodations, and the acquisition of information that is useful to stakeholders (Glover & Albers, 2007; Levitt et al., 2007). Schools are encouraged to take into account the simplicity of scoring and interpreting the measure and acceptability among school administrators, teachers, and parents (Caldarelle, Young, Richardson, Young, & Young, 2008). Screeners that are lengthy may lead to unreliable data collection, as raters may become fatigued or irritated by the time demands (Kamphaus et al., 2007). In contrast, screening methods that are inexpensive, solve a high priority problem, require little effort, and are central to the core mission of education tend to be more acceptable among educators (Severson et al., 2007).

In recent years, research teams have become increasingly responsive to these issues. One exemplar is the recently developed BESS, the screening tool derived from the Behavioral Assessment System for Children (BASC; Reynolds & Kamphaus, 2004). Researchers utilized principal components analyses to reduce the parent and teacher versions of the BASC (originally over 100 items) to fewer than 25 items and 5-min administration time with evidence of strong internal consistency (alphas over .90 for both raters), concurrent validity, and predictive utility (DiStefano & Kamphaus, 2007; Kamphaus et al., 2007). The authors also reported an expedited return rate and less resistance from teachers in completing this screener as compared to the extended version. Yet along with cost, the level of training required to administer, score, and interpret screening results is often unaddressed. Although the BESS is brief, reliable, and predictive of future behaviors (DiStefano & Kamphaus, 2007; Kamphaus et al., 2007, 2010), some school districts may be deterred by the cost (e.g., nearly $600 for the scoring software and approximately $1 per student for each administration of the measure) as well as the graduate level training required to interpret results. Fortunately, many screening tools are publically available free of charge and can be administered with little training (e.g., Strengths and Difficulties Questionnaire, SDQ; Goodman, 1997).

Although some tools may be expensive to purchase or require advanced education interpreting results (e.g., Behavior and Emotional Screening System, BESS; Kamphaus & Reynolds, 2007), there is evidence that the costs to society as a result of untreated mental health problems outweigh the monetary or time costs of such instruments (e.g., Kessler, 2009). Nonetheless, each planning team must assess the immediate costs they can incur for the screening program and the short- and long-term costs of leaving the problem unaddressed, to determine a relative cost-benefit ratio (Flanagan, Bierman, & Kam, 2003).

Phase 3: Creating Links and Sharing Information Following Identification

Recommendations for effective school mental health programming (Weist et al., 2007) indicate that all mental health services should be linked and coordinated. This suggests that universal screening programs must adequately link the

screening data to follow-up services (e.g., ongoing monitoring, further assessment, early intervention) for children identified as at risk. These programs should map onto existing school or community services identified during the resource mapping phase. Screening tools that do not connect well to subsequent assessment or intervention approaches are not likely to produce the desired outcomes in youth and schools (Kettler & Feeney-Kettler, 2011) and are unlikely to be sustained. Thus, it is recommended that the planning and implementation team create a plan for this coordination of care. In doing so, teams may consider the following paths of coordination: (1) sharing the screening results with parents to increase parent recognition of problems and increase monitoring or service utilization, (2) using the screening results to either monitor or access services within the school system, and (3) sharing information with resources outside of school (with parent consent) to facilitate child and parent access to resources in the community. To date, evidence-based guidelines for successful coordination in these areas are not available; however, review of emerging literature across these three domains is presented below.

Sharing Results with Parents

Parents are the gatekeepers to providing children with needed services. Unfortunately, research shows that parents often do not recognize that a problem exists despite positive screening results (Girio-Herrera, Owens, & Langberg, 2013). Furthermore, one study found that the majority of parents believed services were not necessary even after being informed of the child's problems (Bussing, Zima, Gary, & Garvan, 2003). In fact, approximately one third of children do not receive further evaluation after identification (e.g., Nemeroff et al., 2008). Thus, how and what information is presented to parents following a positive screen may impact parent help-seeking behavior.

The medical community has accumulated evidence that engaging parents following obesity screening increases the probability that parents will seek services (e.g., Grimmett, Croker, Carnell, & Wardle, 2008; Kubik, Fulkerson, Story, & Rieland, 2006). Parents of identified children who were mailed a letter reporting their child's weight status, along with additional specific tips or recommendations, were associated with increased parent awareness of child weight status (Chomitz, Collins, Kim, Kramer, & McGowan, 2003), parent-reported dietary changes for children (Grimmett et al., 2008), and considerable parent support for school-based body mass index screening and parent notification programs (Kubik et al., 2006; Kubik, Story, & Reiland, 2007). However, engagement interventions developed in schools for families of at-risk children identified through mental health screening have not been previously explored until recently. Girio (2010) examined the effects of an engagement intervention on parent adherence to recommendations among parents of kindergarteners who screened positive for social, emotional, behavioral, and adaptive problems at school entry. Among parents who received an individualized feedback session (that included a report of results, recommendations for sharing the results with the teacher and medical doctor and obtaining further assessment, and a list of local resources) held at the school following a positive screen, 67 % subsequently followed the recommendation to share the results with their child's teacher and 38 % shared the results with the child's primary physician. Further, parents who were randomly assigned to receive an enhanced feedback conditions that addressed potential barriers to recommendation adherence showed increased adherence to sharing screening results with their child's primary physician, relative to those who received the standard feedback. This study demonstrates the potential benefits of sharing screening results with parents. However, the findings are preliminary and warrant replication.

Sharing Results Within the School System

Universal screening programs fit naturally within multi-tiered response to intervention (RTI) frameworks common in school districts today (e.g., positive behavioral support (PBS) programs). According to the U.S. Department of Education-sponsored National Center on Response to Intervention, RTI "integrates assessment and

intervention within a multi-level prevention system to maximize student achievement and to reduce behavioral problems" (2010, p. 2). In most multi-level programs, Tier 1 includes universal screening and intervention for academic and behavioral problems. Thus, the universal screening procedures discussed in this chapter align with Tier 1 services. For example, if after receiving Tier 1 supports, a student still demonstrates behaviors outside of normal limits according to further universal screening results, this should be shared with the RTI, PBS, or intervention assistance team within the building. Such teams can then connect the child to Tier 2 supports. Tier 2 supports are typically more individually focused and include supplemental small group instruction, small group behavioral skill building (e.g., anger management), brief behaviorally focused interventions (e.g., check-in/check-out systems), or individualized interventions conducted in the general education classroom (e.g., daily report cards).

Sharing Results with Community Resources

Despite recommendations to share school-based universal screening results with community agencies (President's New Freedom Commission, 2003), there are very few studies that have examined these procedures. Uniquely, Vander Stoep and colleagues (2005) provide a detailed account of their experience conducting a universal screening at the transition to middle school and offer insights into procedures for sharing information with parents, school employees, and community agencies. Students who screened positive on self-report measures received a 20–30-min follow-up clinical assessment at school and an action plan was put into effect. The individualized plan included any, or all, of the following services: homework clubs, tutors, school guidance counselors, referrals to community mental health centers, and a phone call to inform parents. Although information sharing and connections to services were available; the authors did not report on the actual usage of these services. However, they noted several barriers parents experienced that may have interfered with service utilization, highlighting the need for both motivational enhancement components for parents and a strategy to measure adherence (Vander Stoep et al.).

In summary, it is recommended that screening data be shared with various parties to enhance the likelihood that the positive screen will lead to an action plan (monitoring, assessment, or early intervention) However, additional research is needed to evaluate the best methods for sharing screening results and for coordinating these efforts across parents, schools, and service providers.

Emerging Areas of Research and Future Directions

Cost-Effectiveness and Long-Term Benefits of Screening

As we continue to encourage universal mental health screening among a host of other important school-based mental health recommendations, it is critical that we obtain a public policy framework aimed at minimizing costs and maximizing benefits (Offord, Kraemer, Kazdin, Jensen, & Harrington, 1998). Screening is generally perceived as beneficial, yet important questions still remain about the long-term costs and benefits of screening. Research is sorely needed to examine (1) the cost of conducting a variety of universal screenings, both those that explore broad and specific mental health problems and (2) the benefit of screenings as measured by a variety of public health factors, including mental health and health indicators. For instance, how may screening reduce and prevent incidence of mental health disorders over time or reduce impairment associated with such disorders? Do universal screening procedures expedite the time it takes for children to receive quality services? Does screening prevent and reduce academic failure and school dropout? What associated savings occur for school districts and society over time? What are the best predictors of various mental health problems as well as the most important outcome or

criterion variables? Providing answers to these questions may encourage schools to invest in screening, improve the number of committed community partners, and increase public funding for universal screening.

Improving the Usability of Screeners

There remains a critical need for a brief, psychometrically strong tool that screens all children for a wide variety of problems that is free, requires no training or advanced degree, and allows for use by multiple raters. The 6-item Impairment Rating Scale, although originally used as a global measure of impairment for children with attention deficit/hyperactivity disorder (Fabiano et al., 2006), fits these criteria and has recently been examined for use as a universal screener among kindergarten children at the point of school entry (Girio-Herrera et al., 2012). Results of the IRS as a screener were promising and indicate strong concurrent validity for the teacher IRS ($rs = .24$ to .67; Area Under the Curve (AUCs) = .66 to .93) and moderate concurrent validity for the parent IRS on the parent-rated BASC-2 ($rs = .19$ to .49; AUCs = .49 to .58) (Girio-Herrera et al.). Additional research on the IRS as a screener is warranted, yet initial results suggest that it may serve as a psychometrically strong and user-friendly screener for schools.

Additional research is needed on whether the majority of screeners are acceptable and meaningful among school staff and stakeholders (Kettler & Feeney-Kettler, 2011). If the team does not find the screener to be acceptable and provide meaningful results, the likelihood that screening will continue is greatly diminished. There is a dearth of information regarding the acceptability of screeners and screening process, along with the social importance of the effects of screening. Accessing this information may provide insight into which aspects of screening are successful and why as well as how failure in screening occurs. This feedback can then be used to develop multiple iterations of screeners or procedures for quality improvement purposes.

Conclusion

The current evidence and practice associated with universal screening for mental health problems in schools offered in this chapter serve as a guide for the key processes of planning, implementation, and follow-up services. Our review indicates that many gaps within this body of research still exist. There is a need for an increase in active partnerships among schools, universities, and other community organizations to undertake the research goals outlined in this chapter. Data provided by such partnerships hold the key to developing empirically supported guidelines for all phases of the universal screening process.

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Culturally Competent Behavioral and Emotional Screening

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Introduction

Growing recognition of the unidentified and unmet mental health needs of children has led to an increased focus on screening approaches and early preventive treatments (Levitt, Saka, Romanelli, & Hoagwood, 2007). Although the premise behind screening for mental health problems is decades old, it is only recently that schools are starting to endorse screening initiatives to determine who may benefit from additional assessment, prevention, or early intervention services (Albers, Glover, & Kratochwill, 2007). A variety of screening instruments are now available, and schools are beginning to incorporate screening efforts into their existing service delivery frameworks, such as response to intervention (RtI) models. In fact, federal legislations such as the 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA) promote and provide funds towards efforts to screen students (see 34 CFR 300.226, § a of IDEA, 2004).

In accordance with a public health approach, the goal of screening is to identify early symptoms or risk among an entire population instead of solely focusing on individuals already diagnosed with problems (Dowdy, Ritchey, & Kamphaus, 2010). Schools have been posited to be an ideal location for the delivery of population-based mental health services, such as screening, due to the routine attendance of children and the acceptability of receiving mental health services within schools (Burns et al., 1995). Theoretically, every student should have an equal opportunity for early identification, intervention, and preventive services, and screening provides a means to these ends. This goal is certainly the desire of parents, practitioners, teachers, students, and policymakers alike. However, as the field of screening is far from mature, there are still unanswered questions regarding how to best accomplish this goal.

The changing demographics of US schools and society as a whole, and the globalization of education in general, increase the need for skills to work with diverse children and families in a culturally competent manner. The practice of screening for mental health risk is no exception and is of particular importance due to the intertwined nature of

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social-emotional competency and culture (Yates et al., 2008). Social and emotional constructs, such as temperament, activity level, or openness of expression, are culturally influenced (Yates et al.). If pertinent cultural information is not considered in the screening process, professionals may misinterpret behaviors as being maladaptive, when in fact they are quite consistent with cultural norms. Additionally, students' language abilities can impact the outcomes of mental health assessment whereby professionals may view and rate behaviors as atypical, when they are due, at least in part, to the act of learning a second language (Yates et al.). For example, students, as a result of learning a second language, may display symptoms of withdrawal, attention problems, anxiety, low self-esteem, disorganized behaviors, and defensiveness (Rhodes, Ochoa, & Ortiz, 2005). Providing an assessment without considering the linguistic abilities and cultural background of children is clearly problematic. As such, this chapter is aimed at providing information on screening approaches for culturally and linguistically diverse students. Considerations for conducting screening and providing subsequent treatment in a culturally competent manner will be provided. Strategies for professionals, practical considerations, and future research needs will be highlighted with the goal of ensuring that screening is conducted in a way that ensures all students have an equal opportunity to receive needed services.

Foundational Considerations

Prior to offering strategies and considerations towards a culturally competent screening practice, it is important to define relevant terms. Although at a glance the terms "screening," "mental health," and even "cultural competence" may seem unambiguous, they do conjure up a variety of different meanings. Screening, which is generally defined as examining for the presence of a problem, can be utilized to detect existing problems, early symptoms, or the risk of developing a problem (Kamphaus, Dowdy, Kim, & Chin, 2013). The distinction between detecting problems or risk is especially critical when discussing mental health in children or adolescents. The detection of risk is favored as it offers the opportunity for further preventive or early intervention services, when problems are both easier to ameliorate and less costly to the individual. In this regard, the recent landmark work of the National Academies suggested that:

> For prevention, one of the goals of screening should be to identify communities, groups, or individuals exposed to risks or experiencing early symptoms that increase the potential that they will have negative emotional or behavioral outcomes and take action prior to there being a diagnosable disorder. (O'Connell, Boat, & Warner, 2009, p. 221)

Consistent with this goal, it has been suggested that the terms "early identification and early intervention" be used in lieu of the term screening (Crowell, 2005). Screening or early identification should not be the end goal but rather a first step in offering additional services to those students identified as in need.

The term "mental health" also suffers from definitional ambiguity. Historically, "mental health" has been used to convey a lack of psychological problems or illness. However, mental health refers not only to the absence of dysfunction but also to optimal functioning in psychological and social domains (Kazdin, 1993). Screening to date has been focused on detecting psychopathology or risk of mental illness, but there is a growing awareness of the need to ultimately gather information that will promote mental health (Dowdy, Furlong, Eklund, Saeki, & Ritchey, 2010). Regardless of what term is used, practitioners interested in screening must be clear on what their ultimate objectives are and for what they are screening. For example, a screening effort could be solely concentrated on screening for depression and risk for suicide, as is common with *TeenScreen* (see www.teenscreen.org of National Center for Mental Health Checkups at Columbia University, 2003). Similarly, screening can be aimed at detecting risk for behavioral disorders (e.g., *Systematic Screening for Behavior Disorders,* Walker & Severson, 1992). Alternatively, a screening effort may be focused on detecting mental health risk more broadly, by assessing for internalizing, externalizing, school, and adaptive

skills functioning (e.g., *BASC-2 Behavioral and Emotional Screening System*, Kamphaus & Reynolds, 2007). Screening for positive psychology constructs, such as life satisfaction, subjective well-being, or quality of life, is another emerging approach that may complement the traditional mental illness focus (Dowdy, Furlong et al., 2010). Mental health screenings are aimed at a wide range of symptoms and functioning, cautioning users to be aware of what they are actually interested in detecting.

In the same way, users must be aware of their intentions when screening; it is critical to understand the population in which the screening will be conducted. At the most fundamental level, practitioners must be knowledgeable of the prevalence, occurrence, and different presentations of mental health conditions across different cultures. There are tools available to "assist the clinician in systematically evaluating and reporting the impact of the individual's cultural context" (American Psychiatric Association, 2000, p. 843), such as the "Outline for Cultural Formulation and Glossary of Culture-Bound Syndromes" in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) appendix (American Psychiatric Association). Unfortunately, similar to the current DSM-IV diagnostic system, screening often does not incorporate cultural information systematically but treats cultural considerations as supplemental (Alarcon, 1995). However, culturally competent practitioners, using some of the tools outlined within this chapter, should aim to incorporate cultural information in every step of the screening and treatment process, from choosing the appropriate tools to determining appropriate interventions following a positive screening result.

Cultural competence is "the integration and transformation of knowledge about individuals and groups of people into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of services; thereby producing better outcomes" (Davis, 1997). As evident in this definition, cultural competence is a multifaceted, complex, and ongoing process. As a part of a lifelong endeavor to attain cultural competency, there are three key components to strive for: (a) cultural sensitivity, being aware and appreciative of human cultural diversity; (b) cultural knowledge, understanding the facts of basic anthropological knowledge of cultural variation; and (c) cultural empathy, being able to connect emotionally with a client's cultural perspective (Tseng & Streltzer, 2004). While the following sections will be unable to describe every way in which to provide culturally competent screening and treatment, we aim to highlight overarching suggestions to consider.

Considerations and Recommendations for a Culturally Competent Practice

In a culturally diverse society, mental health practitioners are tasked with implementing a screening practice that maximizes validity and effectiveness within a multicultural population. Individuals need to be sensitive and recognize the impact that culture may have on the entire screening process (Anderson & Goldberg, 1991). After making foundational decisions (such as clearly establishing the objectives of screening, determining what is being screened for, and who the population of interest is), practical decisions, in light of cultural considerations, will need to be made. For example, practitioners will need to determine what instrumentation to use, how to best collect screening data, as well as how to successfully provide culturally appropriate interventions. Ethical issues also deserve attention. Chafouleas, Kilgus, and Wallach (2010) urged those interested in screening to consider the ethical implications regarding (a) community acceptance, (b) family rights, (c) identification of those to receive services, and (d) service delivery. It is critical to acknowledge that decisions about screening and treatment are not merely procedural but have real ethical implications, particularly when screening cultural and/or linguistic US population subgroups.

In the following sections, essential components to the design of a culturally competent screening program are reviewed. These include the potential benefits of screening, the importance of language

before and during screening, and the examination of the psychometric properties of potential screeners prior to implementation. Additional considerations include multifaceted data collection, acculturation, cultural brokers and communication styles, organizational culture, and finally, treatment and intervention considerations.

Potential Benefits of Screening

Students of US racial and ethnic minority groups are placed in programs for special education services at a higher rate than their white peers (U.S. Department of Education, 2006). Such overrepresentation of cultural and linguistic students in special education is troubling as research has demonstrated that students in special education may suffer from social isolation and lower self-esteem, receive substandard education, and are twice as likely to drop out of high school (Harris, Brown, & Richardson, 2004; Waitoller, Artiles, & Cheney, 2010).

Currently, students are most often referred to special education through some sort of teacher referral process. The teacher referral process is idiosyncratic and fraught with inaccuracies, with referral decisions frequently differing from structured and more objective ratings of a child's adjustment (Eklund et al., 2009). Many teachers lack specific training in identifying and serving students with emotional and behavioral problems (Lewis, Hudson, Richter, & Johnson, 2004; Maccini & Gagnon, 2006). Weaknesses in practices currently used to identify and refer students for special education might be addressed through the use of a data-driven tool for assessing behavioral, emotional, and related risks. Thus, a well-planned screening program has the potential to address disproportionality in special education referrals as well as remove the burden of responsibility for such referrals from teachers.

Importance of Language

Even before screening begins, the dominant language(s) of the groups intended to participate in screening must be considered. Attitudes about mental health issues and the usefulness of early identification and intervention will vary across individual families and cultural groups. Some individuals may have developed a distrust of the written form, outsiders, and/or "the system." For example, immigrants who are undocumented may be hesitant to complete any paperwork that appears legal in nature for fear that it will lead to deportation or services that may be related to being identified in "the system" and subsequent deportation (Cross, 1993); therefore, gaining parental consent might be challenging. Providing access to all materials in the dominant language of the student and parent may be enough to address this problem; however, in some instances, it will be necessary to collaborate with a trusted individual in the community to gain trust and rapport.

Considerations of the language dominance and the readability level for both students and their parents/guardians are also critical components when selecting a screening instrument. First, it is recommended that informants who are English language learners are screened in their preferred language of communication. For students, language considerations should be individualized, with data collected about language history, dominance, proficiency, and preference based on modality (i.e., preference for speaking versus preference for reading; Ochoa, Riccio, Jimenez, De Alba, & Sines, 2004). Second, in addition to language, the reading level of the consent forms and the screening measure must be acceptable for the selected informants. If this is not feasible, another modality that accommodates all participants is recommended. For example, measures may be read aloud to either students or parents. In psychological assessment, reading items aloud has been found to improve performance (e.g., Bolt & Thurlow, 2007), and many psychological assessments allow for such accommodations (Kamphaus & Frick, 2005). Finally, measures should not simply be directly translated from the languages in which they were originally developed. Using pure translations without considering potential changes in the psychometric properties of the instrument can cause unforeseen consequences, as will be discussed in

the next section. Therefore, those designing a screening program should choose measures for which there is adequate evidence of appropriateness and psychometric properties *within the population that is going to be screened.*

Psychometric Considerations

Screening measures should be psychometrically sound and user friendly (Glover & Albers, 2007) and should be examined across diverse populations, including language translations (Tyson, 2004). If originally developed for use within a different population than that which is intended for use in the screening process, there must be evidence of measurement equivalence for the intended sample. These psychometric considerations are critical to ensure that the constructs that are intended to be measured by the instrument are in fact measured.

In terms of language equivalence, before using a translated form of a screener, there must be an examination of the degree of similarity of constructs assessed and inferences made across language when test items are translated (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement Education [NCME], 1999). Translation equivalence must be achieved to ensure that the screening tools are in fact measuring the constructs they were intended to measure (Kamphaus & Frick, 2005). Similarly, even when language is not a critical concern, the screening measure must exhibit measurement equivalence for all groups, including the ethnic and minority groups being screened. Although conducting such validation procedures may be a tedious task when screening diverse populations of students, it is necessary in order to establish confidence that the score inferences made across groups are truly based on factors, constructs, and items that operate in an equivalent fashion across those groups. Lastly, screening assessments should also be vetted by diverse and culturally competent experts to avoid including items that are culturally or linguistically bound, or that include items or techniques that limit children with impairments in their motor, speech, and language skills, with comprehension deficits, or who have limitations as a result of their sensory needs (IDEA, 2004).

Measurement equivalence can be assessed in several ways, including tests of item invariance that provide information about differences in item difficulty and discrimination across subgroups. Differential item functioning (DIF) is present when the properties of an item vary across members of different groups, despite having similar mean levels of the latent trait (Bond & Fox, 2007). Difficulties with factorial invariance are evident when the constructs being assessed differ by group membership; for example, one item might load onto factor A for Latino/a students, but the same item loads onto factor B for non-Latino/a students. Ideally, those who develop new rating scales and screeners should examine group equivalence and present such evidence prior to use (Tyson, 2004); however, this is often not the case. Although there is evidence of measurement equivalence for longer, omnibus parent rating scales across language translations (e.g., *Child Behavior Checklist* as cited in Gross et al., 2006), there is limited psychometric evidence for screeners across diverse subpopulations (Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham,, 2007).

Multifaceted Data Collection

When a screening program is implemented, inferences are made regarding the outcomes, such as identifying individuals who are in need as well as grouping students together who share similar needs (Hosp, Hosp, & Dole, 2011). To limit the effects of predictive validity bias on screening decisions, additional data may be utilized as a part of the screening process to limit the amount of false positives and negatives (Hosp et al.). As a result of a lack of adequate, psychometrically sound, evidenced-based screeners for culturally diverse populations, alternative formal and informal methods have been employed. These methods have included both norm-referenced tools and idiographic modalities (e.g., direct observations, interviews).

In particular, informal methods of assessment including behavioral observations, child interviews, teacher interviews, and parent interviews have been judged by school psychologists to be very helpful when conducting assessments for students who are English language learners (Ochoa et al., 2004). Additional data such as recent stressors and social and emotional functioning across settings should also be considered. Practitioners can also develop locally based norms to make screening comparisons, as opposed to national norms that do not adequately represent cultural and ethnic minority groups. Local norms are valuable in identifying the students with the most need and that reflect the characteristics of the local population (Glover & Albers, 2007). However, national norms also have benefits such as comparing a student to his or her grade level or age group (see Glover & Albers, for a further review of local norms). Communication with students, parents, and families is also necessary to consider data within each student's and family's own sociocultural framework and accurately interpret screening results.

Acculturation

When screening a diverse population, acculturation levels of students and families are relevant considerations. Acculturation refers to the acceptance, identity, and orientation of an individual in relation to both their heritage-culture and receiving-culture values and practices (Flannery, Reise, & Yu, 2001). As previously noted, cultural identity and levels of acculturation are important as many social-emotional constructs are culturally based or mediated (Yates et al., 2008). Therefore, practitioners may conclude that behaviors are maladaptive when they are in fact appropriate given a particular cultural context. In addition, expressions of many mental health symptoms are also culturally bound (American Psychiatric Association, 2000). For example, students who are learning English or are experiencing stress related to their acculturation may appear to demonstrate mental health symptoms (Yates et al., 2008), when they may be experiencing a normal developmental process (e.g., see Schwartz, Zamboanga, & Jarvis, 2007; see also Quintana, 2007). Conversely, others have indicated that students who are experiencing acculturation stress are at higher risk for depression and suicide (Hovey, 2000; Walker, 2007). It is critical that practitioners be knowledgeable of the severity and expression of mental health symptoms cross-culturally, in order to ensure that students are not overidentified due to lack of attention to cultural issues or underidentified and thus ignore problems that may be indicative of a disorder or suicide risk. Additionally, to account for acculturation stress that may or may not be evident in screening results, culturally competent practitioners need to be well versed in models of acculturation, cultural prevalence of mental health disorders, and processes related to language acquisition and identity development.

Communication and Cultural Brokers

Culturally competent practitioners are knowledgeable regarding the factors related to effective and successful collaboration with multicultural populations. Communication with all stakeholders, including students and their families, is critical before, during, and after the implementation of a screening program. In some instances, awareness of barriers to effective communication is evident and practitioners must consult with other experts. If the practitioner is not a member of the local community, a cultural broker who is familiar with the community and its customs and language should be sought as a collaborator. Cultural brokers may be able to help assist with the differences of communication style that culturally diverse populations have when consulting with school professionals (Sheridan, 2000). However, in addition to utilizing cultural brokers, practitioners should demonstrate ethical behavior, respect, and sensitivity when interacting with clients, especially in cross-cultural collaborations (Hogan, 2007).

Cultural brokers, mediators, liaisons, or trained interpreters from the neighborhood may be required to gain trust, maximize the exchange of

information, and plan for the most efficient and effective implementation process (Singh, McKay, & Singh, 1999). While it is common practice for bilingual school staff (e.g., custodians, direct care staff, office personnel), family members of students, or the students themselves to serve as interpreters, these practices can be problematic and are not recommended. School employees without mental health-related skills training may lack the ability to manage the emotional content, may inadvertently create disparities and misinterpret the intended message, or may assume control of the interaction (Paone, Malott, & Maddux, 2010). Also, when children within the family act as cultural brokers of sensitive and critical family information, levels of maladjustment are more likely to be elevated (Martinez, McClure, & Eddy, 2009). It is therefore recommended to include cultural brokers with mental health training when sharing screening results, conducting debriefings, or communicating during the follow-up and treatment phases with cultural minority families (Singh et al., 1999).

Organizational Culture

A successful culturally competent screening program must be able to overcome barriers to screening such as the lack of infrastructure and limited resources for implementing screening programs, not to mention the additional adaptations and accommodations required to meet the needs of a micropopulation (Weisz, Sandler, Durlak, & Anton, 2005). It is suggested that those who implement screening programs are knowledgeable about both the cultural climate of the school and the various sociocultural factors of the students and families within that school community. In regards to school culture, the organizer must have an understanding of how resources are allocated, have "buy-in" from key stakeholders who are supportive of culturally competent approaches, and know how to make adaptations to the current system (Cross, 1993). A school that has valued cultural and linguistic diversity or has provided training for their professionals in cultural competence can improve the communication, draw appropriate conclusions, and decrease cultural bias during the screening implementation and follow-up processes (Anderson & Goldberg, 1991). Furthermore, according to Anderson and Goldberg, a school climate that values diversity is more likely to implement a culturally complement screening program and develop the rapport with families and students needed to illicit their trust and support in such an endeavor.

Treatment and Follow-up Considerations

When students who are in need of interventions are identified, either in selected groups or individually, practitioners must determine the validity of the referral, as well as the appropriate follow-up approach. Services and supports after identification should be equitable and germane to the cultural and linguistic characteristics of the populations served (Huang et al., 2005). First, when a student is identified as "at-risk" or with "elevated" risk status based on screening results, a careful review of each student within culturally relevant norms and expectations is warranted. Cultural misinformation, racism, cultural differences, childrearing practices, response to disobedience, perceptions of mental health or illness, communication styles, and help-seeking behaviors that influence students' functioning in home, school, and community settings are some of the factors to be taken into account (Lambros & Barrio, 2006). Second, after the screening data have been reviewed, implementers must decide how referrals for intervention services will be made and how services will be provided. When recommending or implementing intensive individualized interventions, considerations of individual family and cultural values, including their openness to services, should also be considered. Practitioners must also be well versed in evidence-based intervention practices as applicable to the student in need of services.

Openness to services

Attitudes towards mental health services can vary across cultural groups and individuals. Practitioners are called to be knowledgeable

about the resources both inside and outside the school. Mental health stigma and bias create differences in utilization and the seeking of services. Practitioners should have knowledge of help-seeking behavior of cultural minority clients and power relationships in consultation and treatment (see Cauce et al., 2002; see also Power, Eiraldi, Clarke, & Mazzuca, 2005, for a review).

Attitudes about screening may vary across individual families and cultural groups; dominant language was reviewed previously as one potential barrier. Parental acculturation level has also been identified as a factor related to mental health service access by minority youth (Ho, Yeh, McCabe, & Hough, 2007). In addition, diverse conceptualizations of mental health and illness, language and communication barriers, and experiences with racism and discrimination at the individual and institutional level also act as barriers for ethnic minority families (Huang et al., 2005). To alleviate some of these barriers, practitioners can develop trusting relationships; provide low-cost or no-cost options for treatment; provide psychoeducation about mental health symptoms, prevention, and intervention; and individualize interventions so that they are consistent with familial goals and beliefs. Of note, race and ethnicity were found to predict access to publicly funded services but not informal services (Garland et al., 2005). Therefore, students and families may be more open to informal school-based services. Furthermore, treatment and interventions are likely to be most effective if the goals are developed in a culturally sensitive and collaborative manner.

Evidence-Based Interventions

Following screening, families should also be informed and provided with evidence-based practices. Sharing information with families about evidence-based practices allows them the option to determine what, if any, interventions are selected. However, it is also important to note that evidence-based interventions are not yet available for all of the heterogeneous needs of students, families, and schools (Miranda et al., 2005). For interventions that have not yet developed a research base, a collaboration between families and clinical practice can be utilized to adapt evidence-based practices to best meet the needs of a diverse student population (Huang et al., 2005; Power et al., 2005). However, implementers of these interventions must have the competency to use professional judgment and ethical guidelines to adapt research-based practice to meet the needs of their specific population. Additionally, they should collect evidence during implementation to determine the adequacy of the intervention to meet the needs of the population under consideration.

Strategies for Practitioners

The National Association of School Psychologists (NASP), the American Psychological Association (APA), and the Association for Multicultural Counseling and Development have all developed practice standards focusing on multicultural service delivery and competencies. Many of the standards and strategies set forth to aid practitioners with increasing their cross-cultural competence (e.g., see Miranda, 2008; Ortiz, Flanagan, & Dynda, 2008) can be directly applied to increasing a skill set related to conducting screenings and treatment. Additionally, Anderson and Golderg (1991) provided a set of strategies to serve as a tool to assure cultural competence when conducting screening and assessment. For example, and in line with the considerations suggested above, they emphasized the importance of (a) individualizing the screening and assessment process by taking levels of acculturation into account and providing modifications, adaptations, or support such as language interpretation; (b) conducting a self-assessment of one's own cultural background, experiences, biases, and values and examine how they may influence interactions with others; (c) using bilingual and bicultural staff, or mediators and translators, and trying to maintain consistency of providers to establish consistent communication; (d) offering flexibility regarding the process and procedures such as modifying procedures to ensure cultural competence; (e) participating in staff trainings on cultural competence and aiming to achieve standards

for professional competence; and (f) engaging in ongoing discussions with practitioners, parents, policymakers, and members of the cultural communities that you serve.

Unfortunately, despite available recommendations, standards, and guidelines, there are still a number of barriers to culturally competent care. The lack of diversity in the workforce, the poorly designed systems of care, and the poor cross-cultural communication between mental health care providers and patients all contribute to racial and ethnic disparities in health care (Betancourt, Green, & Carrillo, 2002). The lack of access to health insurance, the continued shortage of bilingual psychologists, the lack of training on how to effectively serve diverse populations, the lack of validated measures, and the lack of psychological assessment research specific to culturally and linguistically diverse children are all contributing factors influencing the paucity of adequate psychological services for culturally and linguistically diverse students (Ochoa et al., 2004). Knowledge of these barriers can assist practitioners with taking direct measures to overcome them.

Conclusions and Future Directions

The entire field of culturally competent screening is nascent and not unexpectedly so. The field is rather new when compared to long-standing assessment practices such as multi-level academic achievement testing, intelligence assessment, and personnel selection among others. The history of psychological and educational measurement suggests that behavioral and emotional screening measures will need to be developed and adopted widely before strong programs of fairness, bias, and culturally related outcomes of screening and early intervention practices will be developed. After all, it was nearly 60 years before intelligence tests were strenuously tested for bias (Kamphaus, 2005). Fortunately, the availability of modern statistical techniques and the AERA, APA, and NCME test standards do not permit such long research delays. Existing screeners are already being evaluated for construct validity bias and fairness owing to the overall higher psychometric standards for tests produced today (see Dowdy, Dever, DiStefano, & Chin, 2011, for an example).

Until clear research guidance is available on such topics as construct validity of screeners, variation in informants, cost-benefit analyses of screening and early intervention practices, and effects of such practices on special education disproportionality, practitioners will be almost wholly dependent on the good logic, hunches, experiences, and related research cited in chapters such as this one. Practitioners today are thus advised to keep one eye on the emerging research findings and the other on the goal of acquiring ongoing cultural competencies.

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Early Identification of Psychosis in Schools

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Overview of Psychosis and Schizophrenia

Symptoms and Epidemiology

Psychosis refers to the experience of hallucinations and delusions and can occur in the context of several psychiatric disorders. Although individuals experiencing mood disorders, dementias, medical conditions that affect brain function, and substance use may present with psychotic features, primary psychosis—that is, psychosis not associated with mood symptoms, brain deterioration, or substance use—is conceptualized within the "schizophrenia spectrum." This class of disorders includes schizophrenia, schizoaffective disorder, schizophreniform disorder, and some of the personality disorders. This chapter will focus on the identification and treatment of schizophrenia among youth. Many of the assessment and intervention techniques discussed will likely be helpful for school-based providers who encounter a child with, or with suspected, psychotic symptoms across a range of diagnoses.

Schizophrenia, the most prominent and severe of the schizophrenia-spectrum disorders, can be a devastating mental illness; it directly impacts about 1 % of the adult population worldwide. Defining clinical features of schizophrenia include the presence of "positive" symptoms (representing behavioral excesses) such as hallucinations and delusions, "negative" symptoms (representing behavioral deficits) such as avolition and flattened affect, and disorganization symptoms such as disturbances in speech and behavior. See Fig. 1 for DSM-IV-TR diagnostic criteria for schizophrenia.

Schizophrenia is associated with substantial functional impairment and health comorbidities, such that the total impact of this illness is profound, albeit difficult to estimate. Family members and friends often report burden and distress related to worrying about and supporting loved ones with schizophrenia (Freedman, 2003; Lowyck et al., 2004). Individuals with schizophrenia are also at heightened risk for early mortality due to suicide and a number of medical comorbidities that commonly arise during the course of illness (Saha, Chant, & McGrath, 2007).

Although the definitive causes of schizophrenia remain largely unknown, research has yielded progress toward identifying risk factors associated with the development of this disorder. Both genes and environments, and especially their interaction, appear to play important roles. Family history of schizophrenia or other mental illness, pre- and perinatal factors such as obstetric difficulties or infection during pregnancy, exposure to environmental toxins, and

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A.	Characteristic symptoms (two or more of the following): delusions; hallucinations; disorganized speech; grossly disorganized or catatonic behavior; negative symptoms (i.e., affective flattening, alogia, avolition)
B.	Social/occupational dysfunction in one or more areas including school, work, self-care, relationships
C.	Duration of symptoms at least six months
D.	Prominent mood symptoms (depression, mania) are absent
E.	Disturbance are not directly caused by substance use or a medical condition
F.	In the context of a utism or a pervasive developmental disorder, a diagnosis of schizophrenia is only given if prominent delusions or hallucinations are present for at least one month

Fig. 1 Diagnostic criteria for schizophrenia (American Psychiatric Association [APA], 2000)

drug and alcohol use have been found to create or exacerbate developmental vulnerability (Caspi et al., 2005; Huttunen, Machón, & Mednick, 1994; Torrey, Bartko, Lun, & Yolken, 2007). Markers of abnormal physical and social development, especially in children with known genetic risk, have been found to be significantly more prevalent in individuals who later develop schizophrenia, suggesting that underlying vulnerabilities toward schizophrenia are established very early in life (Schiffman et al., 2002; Walker, Savoie, & Davis, 1994).

Early Symptoms of Schizophrenia in Children and Teens

Schizophrenia is usually thought of as an adult disorder, with a modal age of onset between 18 and 25 years. The prevalence among adults is about 1 % (APA, 2000). Epidemiological evidence, however, suggests that symptoms may commonly begin in adolescence. In one large catchment study, the incidence of the first episode of schizophrenia was highest in the 15–19-year-old population segment for girls and in the 20–24-year-old segment for boys (Amminger et al., 2006). Another study found a 0.5 % prevalence of first-episode psychosis in 16–19-year-olds, suggesting that 50 % of adults who eventually develop schizophrenia may be experiencing symptoms by age 19 (Gillberg, 1986). "Attenuated psychosis-type symptoms" (symptoms similar to psychosis in nature but less severe in intensity, interference, and conviction) may also begin during adolescence, prior to onset of the full-threshold disorder. Given the evidence suggesting that psychotic symptoms among people who develop schizophrenia first arise during adolescence, incorporating a youth-focused approach in the schools may advance the ability to effectively recognize and treat schizophrenia-spectrum disorders during the period of initial onset (Amminger et al., 2006).

Schizophrenia in Children and Teens

Researchers generally consider schizophrenia diagnosed before age 18 as "early onset" and before age 13 as "very early onset." Evidence suggests that early onset schizophrenia (EOS) is associated with higher genetic loading for schizophrenia (Asarnow et al., 2001; Nicolson et al., 2003) and higher rates of schizophrenia risk factors (e.g., obstetrical complications; Matsumoto et al., 2001; Rosso & Cannon, 2003). The DSM-IV-TR (APA, 2000) diagnostic criteria are the same for children and adults, with shared criteria for characteristic symptoms and dysfunction (generally poor school performance for children). Common comorbid problems in both children and adults are disruptive behavior, depression, and anxiety (Asarnow & Asarnow, 2003). As with adults, these children typically present with global neurocognitive impairment impacting functioning (Nicolson et al., 2000).

Although childhood and adult variants of the disorder appear to have much in common, some distinctions concerning prevalence, presenta-

tion, and course have been raised by the existing research on children. Among these youth, research suggests overall a higher male-to-female ratio (Hollis, 1995; Thomsen, 1996).

Children tend to show a slower onset and chronic pattern as opposed to an acute psychotic break (Asarnow, Thompson & McGrath, 2004). Further, children typically present with less well-formed delusions or hallucinations, fewer negative symptoms, and greater problems with cognitive disorganization (Caplan, 1994; Werry, McClellen, Andrews, & Ham, 1994). Delusions and hallucinations may also involve more childlike themes such as monsters or toys (Volkmar, 2001).

Although educational and life outcomes for these children vary greatly, EOS has long been considered a more severe variant of the adult disorder, associated with poorer intermediate- and long-term prognosis. Relative to those with adult-onset schizophrenia, youth with EOS tend to have more impairment in memory, attention, language skills, motor skills, social skills, creative thought, and planning (Brickman et al., 2004; Nicolson et al., 2000; Remschmidt, 2002). Two major reviews (Asarnow et al.,., 2004; McClellan et al., 2001) suggest 50 % of youth with EOS remain severely symptomatic and impaired in key life domains (e.g., self-care, social relations, employment, SES). Possibly calling into question these well-established findings, a recent large-scale follow-up study reported that earlier age of onset was linked to *fewer* positive symptoms and *better* functioning (Amminger et al., 2011). It is important to note, however, that these participants received treatment within the context of the study, and findings might suggest that earlier *identification* (as opposed to onset) leads to better outcomes.

Regardless of the direction of the association, poorer outcomes are related to delays in interventions and the degree to which schooling and developmental achievements are disrupted. Within the school context, persistent symptoms often contribute to social withdrawal/isolation and poor academic achievement/dropout, which are in turn linked to poor adult functioning in multiple areas. Early intervention in schools may support long-term outcomes by bolstering a child's ability to engage in school and acquire adaptive social, living, and occupational skills.

Illness Development

Schizophrenia and related spectrum disorders are perhaps best understood as unfolding in a developmental progression from a "premorbid" period, followed by an attenuated psychosis period, and then reaching full diagnostic criteria for schizophrenia. During the "premorbid" phase of illness, individuals who will eventually develop schizophrenia do not yet demonstrate any clinically relevant symptoms or behaviors that indicate future illness and may function similarly to their elementary and middle school peers. Despite a lack of clinical symptomatology, there has been a wealth of research documenting a variety of non-clinically relevant precursors of schizophrenia-spectrum disorders in this phase of development such as minor deficits in neuromotor functioning and coordination (e.g., Schiffman et al., 2002, 2004, 2005, 2006, 2009).

The premorbid period is followed by a phase of subthreshold symptoms and general functional decline, in which individuals may begin to experience attenuated psychosis-like symptoms (e.g., perceptual disturbances, unusual beliefs, disorganized thinking) without full conviction, as well as more general changes in mood, interests, and functioning. Attenuated symptoms (sometimes referred to as attenuated psychosis syndrome, or APS) may present from weeks to years prior to onset of the full disorder (McClellan et al., 2001), and some research suggests that APS may be present as early as 5 years prior to first-episode psychosis (Klosterkötter, Hellmich, Steinmeyer, & Schultze-Lutter, 2001). APS is likely to present during high school for many individuals on a course toward schizophrenia.

That symptoms often begin during adolescence has important developmental implications for individuals with schizophrenia. Adolescence is a time of rapid social and cognitive development during which teens learn and practice important skills toward eventual autonomy. Developing supportive social networks, dating,

finishing high school, learning to drive, and attaining employment experience are just a few of the gains teens are expected to make before reaching adulthood. The onset of psychotic symptoms during this period can profoundly interrupt typical development through school dropout, social isolation, and periods of hospitalization or intensive psychiatric treatment (Kutcher & Davidson, 2007). Individuals with schizophrenia must not only learn to manage symptoms but also in some cases "catch up" on missed opportunities for learning to function independently.

Schizophrenia is also associated with increased high-risk behaviors, which may be the focus of clinical concerns during the acute phase of illness. Drug and alcohol abuse are highly comorbid with first-episode schizophrenia, with prevalence estimates of abuse ranging from 6 % to 44 % for drugs and 3–35 % for alcohol (Larsen et al., 2006). Suicidal ideation and attempts are also extremely prevalent both prior to and after initial diagnosis in this population. One study of individuals with first-episode psychosis found that 21.6 % of a 282-person incidence sample attempted to commit suicide during a 7-year follow-up period following diagnosis (Robinson et al., 2010). High rates of suicidality among young people with schizophrenia underscore the enormous importance of improving clinical services for people developing this disorder.

Duration of Untreated Psychosis

Fortunately, many individuals with schizophrenia-spectrum disorders are able to manage symptoms, develop meaningful relationships, and function in diverse environments. Variability in outcomes may be due to differences in genetics, neurobiology, symptomatic profiles, social environments, and access to quality mental health care. One factor that has been found to predict outcome is the "duration of untreated psychosis" (DUP). DUP is defined as the amount of time that lapses between the onset of psychotic symptoms and the initiation of treatment. DUP is particularly relevant as it is a *modifiable* predictor of clinical and functional outcomes for individuals with schizophrenia. Relative to those who experience longer DUP, individuals with shorter DUP—that is, those who receive intervention earlier in the course of illness—are likely to show better response to psychopharmacological and psychosocial treatments, higher quality of life, fewer negative symptoms, and reduced overall mortality in the years following illness onset (Barrett et al., 2010; Farooq, Large, Nielssen, & Waheed, 2009; Granö, Lindsberg, Karjalainen, Grönroos, & Blomberg, 2010; Marshall et al., 2005).

Causes of treatment delays are manifold and may vary as a function of individual, family, cultural, and systemic factors. At the individual level, longer DUP may be associated with slow onset of symptoms and relative social isolation (Morgan et al., 2006; Nishii et al., 2010). At the family level, caregiver strain and fears about the stigma of having a loved one diagnosed with mental illness have been found to predict longer DUP (Compton, 2005; Franz et al., 2010). Conversely, supportive family involvement predicts shorter DUP (Morgan et al., 2006). At the systems level, access to care and national gross domestic product have also been found to predict DUP, with individuals in less-wealthy nations typically experiencing longer DUP (Large, Farooq, Nielssen, & Slade, 2008). These findings suggest that context can make a substantial difference in outcomes for individuals developing a schizophrenia-spectrum disorder.

Early Identification and Intervention

Early intervention efforts that might be relevant for students hinge on the ability of clinicians to accurately and reliably diagnose early symptoms in those who are developing psychotic illness. Recent research has made considerable progress toward the aim of reducing or eliminating DUP by endeavoring to identify and even treat schizophrenia-spectrum disorders during the attenuated phase of illness development. Associated with changes in individuals' thoughts, moods, perceptions, behaviors, and functioning, the period of attenuated symptoms is the best

current indicator that more severe pathology looms ahead (Cannon et al., 2008). Further, these symptoms may be very distressing in and of themselves (e.g., Rosen, Woods, Miller, & McGlashan, 2002; Yung & McGorry, 1996).

School-based mental health providers are uniquely positioned to have an important impact on contextual determinants of DUP for students developing a schizophrenia-spectrum disorder. Clinicians who have a presence in schools have the advantage of working from a "prevention" framework with access to all children, not just those with known emotional or behavioral disturbances. This enables the school-based clinician to monitor or intervene with students showing subtle signs of distress or deterioration, such as changes in academic and social functioning, rather than waiting until problems become more acute and impairing. Further, the school-based clinician can actively work to reduce stigma associated with mental health treatment by encouraging families and teachers to engage with mental health services in a familiar community setting. School clinicians can also impact issues associated with access to or knowledge about care, by either providing interventions within the school setting or serving as a knowledgeable referral source for families who might benefit from receiving mental health care in a more traditional clinical setting.

Assessing Psychosis in Students

For young people experiencing or at risk for psychosis, a thorough, empirically based assessment is vital for identifying symptoms and developing an evidence-based treatment plan. Psychosis can be difficult to differentially diagnose in children and adolescents due to both individual and systemic factors. Children and teens may be confused about what is happening to them and have trouble describing their experiences. Symptoms associated with schizophrenia such as social withdrawal and paranoia can contribute clinically to students' reluctance to confide in parents and clinicians. Further, youth-focused providers may be poorly trained to recognize and treat psychosis, and adult-focused providers may overlook important developmental considerations (e.g., Kutcher & Davidson, 2007; Menezes & Milovan, 2000). Many clinicians are unfamiliar with attenuated symptoms, leading to potentially unreliable or confusing diagnoses during this stage of illness (Jacobs, Kline, & Schiffman, 2011). School-based clinicians can play an important role through their trusting relationships with students, developmental expertise, and clinical knowledge base.

Adhering to a few general principles of best-practice clinical assessment may help clinicians to avoid mislabeling symptoms and experiences. The maxim, "when you hear hoofbeats, don't look for zebras," is a useful caution against seeking "exotic" explanations for children's behavior. The relatively low prevalence of psychosis in young people underscores the importance of ruling out more common causes of unusual or disruptive behaviors before considering a schizophrenia-spectrum diagnosis. Gathering information from multiple informants (e.g., student, teachers, parents) and methods (e.g., standardized questionnaires, observation, interview) can also clarify how children present in various contexts. Diagnoses may change over time as young people age into their teenage and young adult years; initial impressions may need to be revisited and refined through periodic reevaluation of symptoms.

Developmental Considerations and Differential Diagnosis

When assessing a student with suspected psychosis, best practices suggest generating multiple hypotheses regarding the causes of a child's behavior. Students who report unusual experiences or demonstrate bizarre or disorganized behaviors may in fact be experiencing psychotic symptoms, but such behaviors may have other functions as well. For example, children often engage in fantasy and imaginative play, such as talking to "imaginary friends" or pretending that they have superpowers, which can be not only normal but adaptive in the appropriate developmental context (Taylor, Cartwright, & Carlson, 1993). It can

be helpful to ask children to describe the difference between imagination and reality in order to assess their level of understanding of these concepts and to gauge their ability to report psychotic experiences.

Other ideas and behaviors may mimic psychosis yet "make sense" in the context of children's lives. For example, children who present with hypervigilance or preoccupations about safety may have experienced traumatic events or live in unsafe areas, thus differentiating their experience from delusional paranoia. Others may endorse experiences that seem unusual to the assessing clinician but are accepted as normal or even encouraged within children's families or cultures. Some examples of this might be religious or paranormal experiences. Gathering information from caregivers regarding whether they regard their children's experiences as typical versus unusual is an essential piece of a valid assessment.

Another source of diagnostic confusion may arise when children are reinforced for reporting psychotic symptoms. Children may learn that reporting unusual symptoms or enacting disorganized behaviors yields rewards such as securing adult attention and concern, escaping from unpleasant tasks, or getting bullies to leave them alone. Completing a functional assessment of the antecedents, behaviors, and consequences surrounding children's experiences may help to distinguish psychotic symptoms from learned behaviors. Clinicians should also be careful to avoid differentially reinforcing children's reporting of feelings and experiences by providing tangible (e.g., toys and candy) or social (e.g., increased attention and warmth) rewards or subtly pressuring children to endorse certain symptoms (e.g., *are you sure you're not hearing voices?*).

Validated Assessment Tools

Semi-structured clinician interviews with both children and their parents can help to obtain or confirm a diagnosis as well as provide a more complete picture of symptoms and functioning. Several validated assessment tools are available for assessing DSM-IV-TR diagnostic categories. Interviews such as the Kiddie Schedule for Affective Disorders and Schizophrenia (KSADS; Kaufman, Birmhaher, Brent, Ryan, & Rao, 2000) and the Children's Interview for Psychiatric Syndromes (ChIPS; Fristad et al., 1998) contain screening and supplemental diagnostic interview questions for the major Axis I childhood disorders in the DSM-IV-TR, including schizophrenia-spectrum disorders. The KSADS is freely available online at http://www.wpic.pitt.edu/research/AssessmentTools/ChildAdolescent/ksads-pl.pdf.

More specialized assessment tools have been developed to rate the severity of psychotic symptoms in individuals with known schizophrenia-spectrum disorders. The Positive and Negative Syndrome Scale (PANSS; Kay, Fiszbein, & Opler, 1987) assesses these two symptom dimensions of schizophrenia, as well as general severity of illness. The Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962) includes scales for several domains specific to assessment of psychotic symptoms, such as suspiciousness, hallucinations, unusual thought content, bizarre behavior, and cognitive disorganization. These scales may be extremely useful for tracking treatment progress and symptom improvement or deterioration but do require specialized training.

Other measures used primarily in research settings are designed to assess subthreshold psychosis-type symptoms typically associated with the at-risk phase. The most widely used such tool in North America is the Structured Interview for Psychosis Risk Syndromes, or the SIPS (Miller et al., 2003). The SIPS is a clinician-administered semi-structured interview which assesses positive, negative, disorganized, and general symptoms implying risk for psychosis onset. Risk status is determined primarily as a function of positive symptom presentation. The SIPS includes five positive symptom domains: unusual thought content, suspiciousness, grandiosity, perceptual abnormalities, and disorganized communication. Symptoms are rated as within the "attenuated" or high-risk range if they violate cultural and social norms yet lack the intensity of florid hallucinations and delusions. For example, children and teens may describe feeling that someone is following them, or hearing odd

Read the following vignette as if you were preparing to conduct an evaluation of the student described. Practice generating hypotheses about potential causes of Mike's behavior and anticipating what additional information would help to support or refute each hypothesis.

> Mike is a 13 year old boy referred by his mom because she has noticed some "odd and concerning" behavior. Mike recently became involved with a group of friends that played an adventure videogame. During the past few months, this game had begun consuming much of his time. Most nights Mike plays the game alone in his room. Mike reports that sometimes he feels that the characters in the game are connecting with him through the TV, some of them protecting him and some trying to harm him. Mike also reports that he sometimes hears a raspy whispering voice. Mike's mother states that Mike had generally been helpful at home, but that he is getting into more frequent arguments with his siblings. Teachers report that his grades are worse this semester than they were last year, and he needs more help than he used to just to keep up.

One hypothesis could be that Mike's unusual experiences are not unusual at all, but are actually normative within his peer group. Learning more about his friends and this particular game might help explore this notion. Another hypothesis is that Mike's experiences are related to poor sleep hygiene and unusual dreams. Relevant questions for Mike and his mother might be: *Does Mike keep the game on all night? Are these experiences happening during sleep, or just before falling asleep or while waking up? If the game is removed from his room and his bedtime more strictly enforced, do these experiences persist or remit?* If removing Mike's access to the game at night does not lead to resolution of these unusual experiences, then evidence for the hypothesis that Mike is experiencing psychotic or attenuated symptoms is strengthened. Another hypothesis might be that Mike is using substances that are causing these experiences to occur. Asking Mike directly about his substance use, or recommending a toxicology screen, could provide data to uphold or reject this theory.

Obtaining information from Mike about the onset, frequency, duration, and intensity of these unusual experiences will provide further data about the duration and course of his symptoms. If Mike's symptoms are recent in onset, and appear to be getting more frequent and intense rather than subsiding with time, additional concern may be warranted. Further, Mike's degree of insight – i.e., his attributions about why these experiences are occurring – may add depth to the diagnostic picture. For example, Mike may assume that the whispering voice he hears is just his imagination playing tricks on him as he falls asleep; alternatively, he may believe that a character in his videogame has become 'real' and is offering him advice. Varying degrees of conviction and/or insight differentiate 'attenuated' symptoms from full-threshold psychosis.

Fig. 2 Assessing psychosis in students

noises, yet these ideas and experiences are not fully formed and interviewees may express doubt or confusion regarding the source of such experiences. The duration, frequency, intensity, and degree of disturbance caused by positive symptoms are important concerns within the SIPS diagnostic framework, such that long-standing symptoms that elicit little or no distress are generally conceptualized as less indicative of psychosis risk than symptoms that are recent in onset and frightening or disturbing to the child. The SIPS interview is not currently publicly available and requires 2-day training. See Fig. 2 for a practice vignette regarding assessing a student experiencing some unusual symptoms.

Self-report tools for the assessment of attenuated psychotic symptoms may be useful instruments for screening and reduce the burden associated with lengthy clinician-administered interviews. Several such screening tools have been developed, including the PRIME Screen (Miller, Cicchetti, Markovich, McGlashan, & Woods, 2004), the Prodromal Questionnaire (Loewy, Pearson, Vinogradov, Bearden, & Cannon, 2011), the Youth Psychosis At-Risk Questionnaire (Ord, Myles-Worsley, Blailes, & Ngiralmau, 2004), and the PROD Screen (Heinimaa et al., 2003). These tools have shown acceptable convergent and discriminant validity as well as test-retest reliability, but additional validation is needed before such tools might be routinely incorporated into clinical practice (Kline et al., 2012).

Intervention Techniques for Students with Psychosis

The evidence base available to guide the psychosocial treatment of psychosis in children and teens is lacking. Medications are the first line of

As you read the following vignette, try to identity at least three different treatment goals that you believe would be helpful for Tiffany.

> Tiffany is a 13 year old student who has told you that she has started hearing voices that she does not like. Over the past month teachers have noticed she has been distracted by these voices at times during class and has trouble focusing on her school work. In addition to trouble focusing, when doing math assignments Tiffany often loses her temper. She has on occasion threatened to hit other students when she has been very upset. Tiffany's teachers share your concerns: her English teacher has said, "Tiffany has trouble maintaining friendships," and her gym teacher has noticed that "sometimes she'll get this blank stare on her face, will laugh inappropriately out loud, and will quit playing." It has been reported that this spontaneous and loud laughter is very distracting to other children, and they sometimes tease her as a result. Other teachers have reported that she does not enjoy unannounced assemblies with large groups of students in the cafeteria. People on her treatment team, including her parents, aren't really sure what to make of her symptoms, especially the voices she hears. To this point, Tiffany's mental health services have been limited to occasional interaction with the counselor at school. Despite confusion and fear about what's going on, everyone is very committed to helping in any way they can. Tiffany's mother is particularly worried because Tiffany no longer enjoys volunteering at the animal shelter, but she does always remember to walk her dog when she gets home from school. She's spending more and more time alone at home in her room.

This information provides descriptions of both Tiffany's symptoms as well as some strengths. Some good treatment goals might include:

- Helping Tiffany to develop strategies to ignore voices if they appear tobe a source of distraction
- Staying on task during class and completing assignments
- Reducing the frequency of temper tantrums
- Using coping skills to avoid angry outbursts
- Improving social skills
- Volunteering regularly at animal shelter
- Participating in family activities and meals
- Helping Tiffany negotiate transitions and disruptions to the typical routines

Fig. 3 Selecting treatment targets

treatment for schizophrenia and have been found to be effective in treating many, but not all, symptoms in youth with schizophrenia. Medications, however, tend to produce little improvement in important domains, such as social functioning and quality of life, and may present very uncomfortable side effects (Patterson & Leeuwenkamp, 2008). To date, however, no randomized controlled trials of psychosocial treatment effectiveness for this population have been published. The information presented below represents an empirically guided approach that "borrows" from the literature on adult interventions and other childhood disorders.

Treatment for students with psychosis is likely to be intensive and involve multiple systems (Schiffman & Daleiden, 2006). School-based clinicians may be well positioned to provide the link between families, schools, and clinical teams. Clinicians could play a key role in identifying students experiencing psychosis or other mental health problems by checking in with teachers about any changes in students' behavior and academic and peer functioning. Once students are identified as good candidates for school mental health services, working early to develop rapport and a spirit of collaboration with children and families through genuineness, warmth, and empathy can provide a strong therapeutic framework from which to implement psychosocial interventions. Communication within the interdisciplinary team involved in the youth's treatment, education, and care will help to ensure that all of these stakeholders are working to support the child's goals and complementing one another's efforts. Psychosocial treatment goals for these youth should focus on "recovery"—sometimes thought of as educational, social, vocational, and

functional well-being—rather than narrowly focusing on symptom management. Given the broad impairment associated with schizophrenia-spectrum disorders, treatment for these students is likely to target multiple goals and behaviors (Schiffman, Chorpita, Daleiden, Maeda, & Nakamura, 2008). After reading the interventions reviewed in this chapter, see Fig. 3 for practice selecting treatment targets for a student with psychosis.

Treatment goals will also vary depending on illness stage (McClellan et al., 2001). During the acute phase of psychosis, families may be at a "crisis point" that has led to their seeking mental health services. Services during this stage should focus on establishing rapport, clarifying diagnoses, providing psychoeducation, initiating pharmacological and psychosocial treatments, and ensuring safety. Once acute symptoms and crises have been resolved, treatment will focus on maintenance, wellness, and recovery. At every stage, clinicians can take care to provide empathy for students' psychotic experiences (e.g., *it must be hard to feel like everyone is talking about you*), but avoid agreeing with or verifying the content of such experiences. Below selected strategies that may be helpful to school clinicians working with youth with schizophrenia-spectrum disorders during both acute and non-acute stages of illness are reviewed.

Supporting Psychopharmacological Treatment

Antipsychotic medications are recommended as the first-line treatment for schizophrenia in young people (Carlisle & McClellan, 2011). If a child is prescribed an antipsychotic medication, however, it does not necessarily mean the child has been diagnosed with a psychotic disorder. Some antipsychotic medications have Food and Drug Administration (FDA) approved pediatric indications for treatment of irritability due to autism and for treatment of manic or mixed episodes in a bipolar disorder. Antipsychotic treatment can also be prescribed for an "off-label" indication, typically severe aggression or irritability (Crystal, Olfson, Huang, Pincus, & Gerhard, 2009). Caution about off-label antipsychotic treatment has been raised because of concerns about limited safety and efficacy data, especially in young children (Domino & Swartz, 2008; Varley & McClellan, 2009).

For youth with psychotic illness, antipsychotic medications may alleviate troubling symptoms, including hallucinations and delusions, but they also have potential to cause significant side effects. In recent years, there has been growing concern about obesity-related side effects, including unhealthy weight gain, increased blood sugar, abnormal cholesterol levels, and, less commonly, new-onset diabetes (De Hert, Dobbelaere, Sheridan, Cohen, & Correll, 2011). Safety monitoring should include baseline and follow-up assessment of weight and height, blood pressure, and periodic fasting blood work (Correll, 2008). Monitoring may be more frequent if the youth has a family history of diabetes or heart disease or if the child is overweight at baseline. Students treated with antipsychotic medication and their parents may benefit from education on healthy diet and active lifestyle choices and positive reinforcement for making healthy changes.

Antipsychotic medication also may cause other side effects, such as problems with sedation and involuntary movements (e.g., hand tremors). Side effects may interfere with school performance or cause social stigma. In supporting youth with psychotic illness, it is important to encourage the child and parents to share any concerns about side effects with the prescribing medical provider. Some side effects can be improved with dosage changes or adding a medication to manage a side effect. In some cases, students may benefit from switching the medication to an alternative antipsychotic agent. Caregivers should be encouraged to ask their child's prescriber about common and serious side effects of any medication the child is being treated with, as well as the plan to monitor for side effects. Some antipsychotic medications may require additional monitoring, such as ECG cardiovascular tests or extra blood work, to assess for side effects which may be "silent" or not easily observable by the parent. It is important

- What is the reason the medication is being prescribed? What is the target problem or diagnosis that the medication is being used to treat?
- What are the common and serious side effects of this medication?
- What is the plan to monitor for side effects?
- What is the time frame that we can expect to see improvement if the medication is working?
- How will you determine if the medication is helping enough to continue? Will you need input from the school to track my child's response?
- How should the medication be taken (what time of day? with or without food? how to handle missed doses?)
- Will the medication interact with any of the over the counter or prescribed medications already being taken by my child?
- What are some suggestions or strategies that may help us to make sure the medication is taken consistently?
- Can you please send an update to the primary care doctor (and any specialists involved in your child's care) about this medication change?
- If the medication works, how long do kids usually stay on this medication?

Fig. 4 Suggested questions for families to ask prescribers before starting a psychiatric medication

for families to follow monitoring tests ordered by the prescriber in order to provide appropriate safety monitoring for both visible (e.g., weight gain) and "silent" (e.g., increased cholesterol) side effects. See Fig. 4 for questions which parents may have for prescribers.

Students with psychotic illnesses often have problems with adhering to a medication regimen. Frequent issues associated with nonadherence include side effect concerns, feelings of stigma about mental health treatment, difficulty organizing daily medication regimen for youth who live among more than one household, and normal adolescent development concerns about wanting to avoid being different from peers. Further, youth may have unexpected or unusual thoughts about taking medication that are tied into delusional symptoms, for example, feeling suspicious that the medication is poisonous. Asking open-ended questions about medication concerns, and reviewing students' understanding of the medication effects, may elicit misinformation or delusional thoughts about treatment that may be impacting adherence. Some youth may also benefit from administration of medication at school during the weekdays if caregivers have difficulty giving the medication consistently. Since youth with psychotic disorders often require long-term treatment, it is important to provide psychoeducation about medications and encourage youth to learn the names and dosages of the medications they take.

Psychoeducation

For both students and families, the period following a diagnosis of a schizophrenia-spectrum disorder is often one of disorientation and even grief (Stein & Wemmerus, 2001). Learning about the disorder, including information about symptoms, causes, and available treatments, can help children and families feel more control and less stigma as they adjust to the diagnosis. Recommending books or websites that provide empirically sound information about mental illness in family-friendly language may be a good supplement to information provided during session.[1] It may be especially important for some families to learn that the available evidence does not support the theory that schizophrenia can be caused by poor parenting.

Teachers and other school staff may also feel overwhelmed when they learn that they will be interacting with a student with schizophrenia. School-based clinicians can help to ease this transition by working with both students and school staff to provide further psychoeducation within the school setting. Emphasizing strengths and similarities, rather than focusing solely on differences (*"John is excited about gym class and*

[1]The website of the National Alliance on Mental Illness (www.nami.org) and E. Fuller Torrey's *Surviving Schizophrenia* (2001) are both recommended references.

nervous about making new friends during lunchtime. Academically, John will probably have challenges focusing that are both very similar, and maybe a little different, to other students you've worked with"), may help teachers to feel more confident about having this child in their classroom and may also prevent stigma, teasing, and other negative experiences.

Behavioral and Cognitive-Behavioral Approaches

Behavioral and cognitive-behavioral therapy (CBT) typically utilizes a "problem-oriented" framework to identify and structure treatment around specific goals. CBT therapists engage clients with an attitude of collaborative empiricism, that is, a focus on working together to "figure out" a client's goals and problem-solve barriers to achieving them (Tarrier, 2008).

Targeting specific behaviors may help students to improve day-to-day functioning despite the recurrence or chronicity of symptoms. Students with schizophrenia-spectrum disorders may benefit from behavior plans, daily report cards, or other forms of token economies designed to shape behavior. For example, students might be reinforced with prizes or special activities for demonstrating desired behaviors such as completing homework and participating in class and lose "points" toward these rewards by engaging in disruptive behaviors such as yelling out in class or throwing tantrums. Ideally, students should help to select target behaviors and contribute their ideas regarding appropriate contingencies so that they can understand and support the plan. New targets can be added to the plan as students master initial goals. It is important that plans be adjusted if they prove to be too "easy" or "hard" for parents, teachers, and children to implement.

Behavioral approaches may also be effective for treating anxieties and phobias that arise secondary to psychotic symptoms. Nakamura, Schiffman, Lam, Becker, and Chorpita (2006) describe the successful treatment of water phobia in a student with schizophrenia who had the delusion that monsters in the water threatened to swim into his ears. Clinicians helped the child to construct a fear hierarchy involving "mildly," "moderately," and "very" anxiety-provoking activities involving water, then collected daily fear ratings as they conducted gradual exposure to the identified activities. Treatment resulted in the child being able to enjoy bathing and swimming. This approach of treating the phobia primarily with exposure, with secondary and limited considerations paid to the psychotic aspects of the phobia, has promise for treating other children with specific or social phobias associated with psychotic symptoms in school settings.

Behavioral approaches might also involve role-playing and practicing specific social and vocational skills to compensate for specific skill deficits. Students may benefit from role-playing skills such as how to introduce themselves, use friendly body language, and participate appropriately in class. Older teens might wish to practice vocationally oriented skills such as greeting customers or practicing job interviews.

Learning to recognize and cope with stressors may be another focus of cognitive-behavioral treatment. Students may benefit from mood monitoring (either self-monitoring or with observational input from others) to identify stressful situations. Scheduling pleasant and relaxing activities into the day (e.g., going to the playground, feeding the school hamsters) may help to reduce overall stress. If particular antecedents are identified as triggers for agitated moods or disruptive behaviors, these might be changed or removed from the environment. Learning to use specific relaxation skills such as deep breathing and progressive muscle relaxation can help children to recover more quickly from inevitable stressors.

Cognitive coping skills may also be useful for children with schizophrenia-spectrum disorders. Students can use self-talk to cope with intrusive thoughts and even learn to "test" their initial, often maladaptive impressions by challenging their beliefs or collecting evidence from the environment. Clinicians can model this process by

asking young clients to generate alternative explanations for misperceived stimuli and events. For example, if a child refuses to drink his juice because he believes that its "tangy" flavor indicates that it has been poisoned, the clinician might challenge the child to think of other reasons why the juice tastes different today—could it be a different brand or past its expiration date? Cognitive techniques emphasize to children that scary experiences such as hallucinations or delusions might be the result of misperceptions and that questioning these perceptions can help them to manage these symptoms.

Educational Accommodations

Many students with psychosis will meet special education eligibility and can be evaluated for qualification under Section 504 of the federal *Rehabilitation Act of 1973* or the Emotional Disturbance category of the *Individuals with Disabilities Education Improvement Act* (2004). Appropriate classroom placement may facilitate the provision of special education services. A recent survey suggested that approximately half of students with schizophrenia are in regular classrooms, with one third in resource or self-contained classrooms (Frazier et al., 2007).

Intervention planning may also be facilitated by information obtained from psychoeducational testing completed by school-based clinicians. In planning for testing and scoring, it can be very helpful for the school clinicians to have an understanding of the student's developmental level, functional level, and unique symptomatology. Test administrators may find that students with schizophrenia require greater flexibility in administration, with less record taking and greater process transparency for paranoia, greater prompting and encouragement for inattention or for amotivation/negative symptoms, and highly structured/nonverbal testing for disorganized symptoms. Interpretation of results also requires substantial judgment as to whether the scores reflect psychiatric illness or the student's ability level. Any testing modifications or scoring uncertainty should be clearly documented.

Including Families

Caregivers of youth with schizophrenia-spectrum disorders report feeling the need for more support, having problems obtaining quality mental health services, and experiencing high levels of overall stress (Knock, Kline, Schiffman, Maynard, & Reeves, 2011). Involving caregivers in treatment decisions, and demonstrating respect for their experience and perspective, can help caregivers to more successfully engage with treatment and advocate for their children's care. Programs designed specifically to support families, such as the National Alliance on Mental Illness's Family-to-Family peer education program, can help caregivers and other relatives to reduce their perceptions of "burden" associated with their loved one's mental illness and feel more empowered to play a role in their recovery (Dixon et al., 2011).

Interventions aimed at reducing family conflict and improving family communication may also be helpful for both family members and youth themselves. Several studies have demonstrated that family environments characterized by higher "expressed emotion" (EE)—that is, families in which communication reflects conflict, demandingness, and negative emotion—are associated with higher rates of rehospitalization and other poor clinical outcomes for individuals with schizophrenia-spectrum disorders (e.g., Hooley, 2010; Moline, Singh, Morris, & Meltzer, 1985). Interventions focused on family problem-solving and communication skills can be valuable for creating a more supportive and less stressful environment to support clients' recovery.

Conclusion

Early intervention for schizophrenia and related spectrum disorders can have positive clinical implications for students with psychotic

symptoms. By establishing a community presence and ongoing relationships with students, teachers, and families, school-based clinicians are well placed to intervene early in the course of illness. Clinician roles may include conducting empirically sound assessments, collaborating with families and other providers, and implementing individualized interventions to help children cope with symptoms and develop their strengths and goals. Although further research regarding psychosocial treatment effectiveness is needed to enhance treatment recommendations for this population, school-based clinicians can adapt best-practice intervention strategies for students with schizophrenia and other psychotic disorders.

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Part VI

Intervention for Specific Problems

Bullying: A School Mental Health Perspective

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The current zeitgeist surrounding the phenomenon of bullying has reached an unprecedented crescendo. Most states have passed some type of anti-bullying law, school personnel are struggling with how to effectively reduce bullying among school-aged youth, and websites and program addressing the issue have increased exponentially. This chapter provides a framework for bullying as a mental health issue and will argue that in order to prevent bullying behaviors, schools, communities, and families will need to work together in order to create a culture where bullying is not rewarded, supported, or accepted. We review standard disciplinary practices and social-emotional learning approaches and describe the Target Bullying Intervention Program (T-BIP) designed to evaluate and address the mental health issues that may be underlying the bullying behaviors. Finally, a call to understand bullying as a mental health problem that, by definition, requires effective mental health promotion and treatment is asserted.

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Disciplinary Procedures in Schools

Unfortunately, many school personnel use generic approaches to school discipline and behavior management, such as zero-tolerance procedures, which do not address the individual needs and deficits of particular students. Moreover, zero-tolerance approaches provide inconsistent consequences for bullying behaviors and do not include components that aim to increase students' social and emotional competence. Zero tolerance sends a message to students that the preservation of order, control, and vague notions of school safety is more important than individual rights, building students' social competencies, and facilitating healthy relationships (Skiba & Peterson, 1999). This is not to say that there should be no consequences for misbehavior; however, consequences need to be developmentally appropriate for students, and their misbehaviors and coordinated prevention and intervention efforts should be established.

Social and Emotional Learning (SEL)

Programs that emphasize prevention, early identification of students with behavioral concerns, and social skills instruction should be implemented in schools in order to create positive school climates and reduce aggressive behavior (Peterson & Skiba, 2001). Although schools are often faced

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with limited training, resources, and budgets, students spend an extensive time in a school building each day, making schools an ideal setting to teach pro-social behaviors (Durlak & Weissberg, 2010). Schools need to identify and implement worthwhile, evidence-based approaches that demonstrate clear learning and behavioral objectives for increasing students' social and emotional development. These social and emotional learning (SEL) competencies include understanding and monitoring emotions, identifying and attaining goals, forming positive relationships with peers and adults, responsible decision-making, and demonstrating the ability to deal with interpersonal difficulties in an effective way. Other skills related to the enhancement of SEL are problem-solving, conflict resolution, self-control, leadership, and competencies related to increased self-efficacy or self-esteem (Durlak, Weissberg, & Pachan, 2010). Individual student behavior plans and functional behavior assessments that teach replacement behaviors can also aid in the fostering of SEL (Elinoff, Chafouleas, & Sassu, 2004).

The Collaborative for Academic, Social, and Emotional Learning (CASEL) has emphasized that the programs that are most successful in forming students' SEL skills are focused on modeling, practicing, and reinforcing desirable social behaviors (Durlak & Weissberg, 2010). Specifically, SEL programs that offer a sequential and integrated skills curriculum, use active forms of learning, devote ample attention to skill development, and create clear learning goals are particularly effective in promoting SEL skills. SEL programs that are continuously monitored and evaluated also produce the largest and most meaningful gains in skill development (Durlak et al., 2010; Durlak & Weissberg, 2010). SEL programs then instruct students to apply these skills to a larger framework, such as violence prevention and community service.

Research has shown that participation in SEL programs is related to gains in academic performance and reductions in problem behaviors. Compared to control students who did not participate in an SEL program, students involved in an SEL program displayed higher levels of prosocial behavior and decreased levels of conduct problems and emotional distress. Compared to controls, students in the SEL group showed an 11% gain in academic achievement following their participation in the SEL program. SEL programs that are implemented consistently and thoroughly have been proven effective for students belonging to various ethnic groups and who have been deemed at risk for emotional and behavioral problems (Durlak & Weissberg, 2010). These gains are in stark contrast to the research on zero tolerance, which shows that suspensions occur at increased rates for African-American students and students verified with emotional and behavior disorders (Skiba, Peterson, & Williams, 1997).

SEL as an Approach to Understanding Bullying Prevention and Intervention

Schools that create positive, supportive, and safe school climates by teaching students the necessary skills for social interactions reduce rates of bullying behaviors (Skiba et al., 2006). Instead of using suspension as the first response to aggressive and bullying behaviors, comprehensive threat assessments and interviews should be implemented in order to evaluate the seriousness and extent of aggressive threats and obtain an account of the incident from relevant individuals involved (Skiba et al.). Suspension or expulsion should only be applied in the most serious of aggressive and violent offenses.

Successful bullying prevention and intervention programs have demonstrated reduced rates of not only fighting but also vandalism and truancy, while increasing students' positive attitudes toward their school (Ttofi & Farrington, 2011). Additionally, effective bullying prevention programs, whether they are universal, secondary, or tertiary approaches, always include awareness and adult involvement. In contrast to interventions that rely solely on punishment, bullying programs usually aim to provide students with knowledge about the causes and consequences of bullying behavior, the feelings of the students involved in bullying, and alternative solutions to aggression and violence (Peterson & Skiba, 2001).

Addressing Bullying Through Positive Behavioral Interventions and Supports

Positive Behavioral Interventions and Supports (PBIS; Horner, Sugai, Todd, & Lewis-Palmer, 2005) is a research-based framework school personnel can use to guide the selection and implementation of evidence-based academic and behavioral practices. PBIS has been developed around the three-level model of prevention and intervention. All students receive Tier 1, or primary support, while students who are at risk for problem behaviors receive Tier 2 (secondary) support. Students who need intensive intervention receive Tier 3 (tertiary) support (Walker et al., 1996). As students receive support through the three levels, the intensity (and therefore the resource requirement) of the interventions increases, while the number of students served decreases. In this way, all students receive some level of support, while resources are still allocated in greater proportion to students who exhibit the greatest behavioral difficulties.

PBIS is a school-wide model for preventing and reducing problem behaviors while increasing positive behaviors (Sugai et al., 2000). PBIS has been implemented in thousands of schools across the United States and has been shown to decrease problem behaviors, resulting in fewer office referrals and suspensions (Bradshaw, Mitchell, & Leaf, 2010; Bradshaw, Waasdorp, & Leaf, 2012; Horner et al., 2009; Waasdorp, Bradshaw, & Leaf, 2012).

Bullying behaviors may be particularly suited to this model of prevention and intervention (Espelage & Swearer, 2008). While bullying is a serious problem for many students, it is likely the case that the majority of students are not frequent perpetrators or targets of bullying (Nansel et al., 2001). Thus, intensive interventions for every student are unnecessary. However, students who are consistently involved in bullying are at risk for serious negative mental health and behavioral outcomes, such as depression, anxiety, suicidal ideation, drug and alcohol use, and incarceration (Swearer, Song, Cary, Eagle, & Mickelson, 2001; Ttofi, Farrington, Losel, & Loeber, 2011). These students need the increased focus and intensity of secondary and tertiary interventions. Additionally, as proposed by the social ecological model of bullying, the multitude of factors surrounding bullying means that individualized interventions are often necessary, suggesting that no single intervention will work for all students. Tertiary interventions, because they are used only for students who need them most, are well suited to this sort of flexibility. For these reasons, schools should consider adapting the PBIS framework for their bullying prevention and intervention strategies and conceptualize a fluid model starting from a prevention focus and moving to evidence-based interventions as needed. Therefore, in terms of a model to address bullying behaviors, we will present an integrated prevention-to-intervention framework.

Primary Prevention and Intervention

The primary level of prevention, often called "school-wide interventions," is designed to target every student in the building. It is generally predicted that approximately 80% of students can be served through Tier 1 strategies alone. The goal of these interventions is to provide a predictable, structured environment in which students know what behaviors are expected of them and what consequences will occur if they behave in undesirable ways. As such, Tier 1 interventions are often preventative in nature. Some examples of interventions at this level that are applicable to most behavioral issues include the development of consistent rules that are taught to students and staff, explicit teaching of desired behaviors, and reinforcement of desired behaviors (e.g., through praise). The promotion of collecting data and using data to inform intervention is a particularly important component of Tier 1 and is a critical part of PBIS.

A variety of bullying intervention strategies can serve as Tier 1 interventions. At the district or state level, anti-bullying policies can be drawn up that outline expected responses to bullying.

Many schools hold regular staff meetings to train staff on how to handle bullying reports. Schools may also hold anti-bullying assemblies or have students create posters to hang throughout the building in an effort to raise awareness of the issue. To support data-based decision-making, schools can benefit from distributing bullying surveys to every student to determine where, when, and how bullying occurs (Sherer & Nickerson, 2010). A combination of these strategies may lead to better outcomes than any particular strategy in isolation.

Increasingly, schools are turning to packaged bullying prevention and intervention programs to serve their Tier 1 needs. However, a meta-analytic review of these interventions found that the programs collectively led to only modest decreases in bullying (Ferguson, Miguel, Kilburn, & Sanchez, 2007). Moreover, caution should be taken in selecting one of these programs, as there are a large number of programs available on the market, and only a few are considered evidence-based. Therefore, schools should not rely on any single intervention package to eliminate bullying behaviors. Instead, schools interested in these interventions should (1) ensure they select a program with strong research support and (2) consider the program to be a Tier 1 intervention and support it with a variety of Tier 2 and 3 interventions. Administrators should anticipate that approximately 20% of students will still require services above and beyond those provided by any Tier 1 strategy and plan their policies and procedures accordingly.

Secondary Prevention and Intervention

In order to prevent more serious behaviors in the future, the secondary level of intervention is designed to address the needs of students who are at-risk for developing significant problem behaviors. Approximately 15% of students are expected to be served at this level. Secondary interventions are more intensive and resource intensive than primary prevention and intervention, often taking the form of small groups or regular meetings with a counselor or psychologist. To qualify a student for secondary interventions, schools often require documentation that primary interventions were tried first but that they were unsuccessful or not potent enough. Importantly, students at this level receive Tier 2 services *in addition* to the Tier 1 services provided to the whole study body (Ross & Horner, 2009).

Students in need of Tier 2 bullying interventions may be those who have been involved in bullying, yet the involvement has not decreased following primary intervention. A common Tier 2 intervention may be placing victims of bullying into a small groups designed to build social skills like appropriate assertiveness skills. Another intervention may be role-playing with bullies and/or victims on how to handle confrontations. Increasing parental involvement through calls or homeschool notes may also assist students at this level.

Ross and Horner (2009) developed and tested a behavioral bullying intervention designed to be used as a Tier 2 intervention in PBIS. They hypothesized that a large portion of bullying behaviors are maintained by social attention. Thus, they taught bystanders and victims to ask the bully to stop, then walk away, and, if necessary, tell an adult. This decreased the amount of social attention available to bullies. Their results showed the expected decrease in both bullying behaviors and unwanted bystander behaviors (e.g., cheering the bully on, laughing). The researchers noted that bullying behaviors that are not maintained by peer attention will likely be unaffected by this intervention; this suggests a need for even more focused interventions for students whose negative behaviors remain even after secondary supports are put into place.

Individual Versus Group Interventions

Group interventions for students with physical or relational aggression problems appear on the surface to be the most efficient manner with which to address concerns. Unfortunately, these types of interventions are marred by several factors which result in reduced effectiveness. Although

the literature is limited due to researchers choosing not to publish neutral or negative effects, several studies have shown how group interventions may negatively impact intervention efforts. These iatrogenic responses to interventions have been suggested to derive from *deviant talk* which influences participation in multiple antisocial behaviors (Dishion & Owen, 2002; Piehler & Dishion, 2007). Deviant talk refers to peers sharing negative ideas or actions such as aggressive exploits or rule-breaking behaviors. This type of talk is more likely to occur between youth with antisocial tendencies who develop friendships or relationships. Furthermore, when these interactions are reinforced, the antisocial behaviors which originally lead youth to be referred for services may increase (Newman-Carlson, Horne, & Bartolomucci, 2000).

Dishion, McCord, and Poulin (1999) conducted one of the few studies which specifically examined the negative effects of group interventions with aggressive youth. Their longitudinal analyses revealed several key findings. Youth who had relationships marked by *deviancy training* (i.e., receiving peer reinforcement during deviant talk) were more likely to display increases in delinquency, substance use, and violence. Additionally, those youth with moderate baseline rates of delinquency were more likely to show increases in future antisocial behavior than other groups. The authors of the study suggested that those deviant behaviors which were met with responses of laughter and social attention by peers served as a strong form of reinforcement. Thus, the likelihood of the deviant behaviors being repeated in the future increased. Dishion et al. concluded that repeated contact with similarly deviant peers within a group could contribute to the iatrogenic effects commonly observed in these settings.

The youth whom Dishion, McCord, and Poulin (1999) studied have similar characteristics to those students who engage in bullying, and the iatrogenic effects discussed in their research can be applied to bullying as well. Intervention programs designed to reduce bullying which are administered within a peer-group format have been shown to produce similar results. In the preface to their intervention manual, Newman-Carlson et al. (2000) describe the iterations and revisions conducted before its publication. One method of intervention delivery the authors attempted was group counseling. Students who were involved in bullying were placed in one of the three groups: (a) bully only, (b) victim only, and (c) bully victims. Newman-Carlson and colleagues wrote that "The 'bullies only' approach proved unsatisfactory because the bullies offered one another support in maintaining their aggressive behaviors. They identified the problem not as their own; but as the victims, who 'deserved what they got'" (p. vii). Deviant talk was clearly a contributing factor in the iatrogenic effects. What is also interesting is the cognitive distortion of blaming the victims expressed by the bullies. Individual interventions may help prevent potential iatrogenic effects of deviant talk and cognitive distortions.

Tertiary Prevention and Intervention

When it has been documented that a student has not responded to secondary interventions, he or she may qualify for Tier 3 intervention. Tertiary interventions are designed for the most challenging students in the school building and also attempt to prevent more serious behaviors that might result in expulsion. Accordingly, they are the most intensive and resource dependent of the three tiers. Approximately 5% of students are expected to require this type of services. As in Tier 2, students being served at this level should still receive primary and secondary interventions in addition to tertiary services. Some examples of Tier 3 interventions include special education services, individualized behavior plans, counseling services, and functional behavior assessments (FBA).

The Target Bullying Intervention Program (T-BIP; Swearer & Givens, 2006) is an example of a tertiary intervention designed using evidence-based cognitive and behavioral assessment and intervention strategies for aggressive youth. The T-BIP is designed as a one-on-one cognitive-behavioral intervention for students

who have displayed a history of bullying behaviors. The T-BIP is an individual cognitive-behavior therapy program administered by a trained therapist. In schools that use the T-BIP, parents of students who are referred for repeated bullying behaviors are given a choice: suspension (typical consequence) or participation in the intervention. Parents of these students are also involved in the intervention through a follow-up meeting with the therapist, school personnel, and student which provides specific and concrete recommendations to ameliorate the bullying behaviors.

The T-BIP intervention takes place in a 3-hour session consisting of assessment, psychoeducation, cognitive restructuring, and followed by a solution-focused feedback session approximately 2 weeks after the individual intervention. Students first complete several questionnaires designed to assess the bullying they have perpetrated, witnessed, and experienced; internalizing symptoms (i.e., anxiety, depression); self-perceptions of academic and athletic competence; cognitive distortions; and perceptions of school climate. Next, the therapist shows the student an age-appropriate PowerPoint presentation that is used to spark discussion and teach about bullying behaviors and why they occur. The student then completes a quiz over the presentation to check for understanding, several worksheets from the *Bully Busters* program chosen to address the specific type of bullying behavior perpetrated by the student (Newman-Carlson et al., 2000), and watches a video that illustrates different types of bullying behaviors. Throughout, cognitive restructuring strategies are used to help the student understand some of the underlying cognitive distortions that he or she is verbalizing. Following the session, the therapist creates a written report summarizing the assessment results and the insights gained from the session and makes recommendations designed to create supports in home and school that will reduce the likelihood of engaging in bullying behaviors in the future.

Bullying prevention programs that emphasize parental involvement have also been shown to decrease bullying behaviors in school. Parents who are involved and aware of their child's academic and behavioral progress at school can create similar home environments that promote desirable behaviors, furthering the consistency of behavioral expectations (Peterson & Skiba, 2001). It has been proposed that parents of students who are at risk for expulsion due to bullying attend regular meetings with school personnel to problem-solve solutions for their child's behavior (Peterson & Skiba, 2001). In this manner, parents can become more aware of their child's misbehavior in school and target similar areas in the home setting. Furthermore, parent meetings build relationships between parents and staff, encouraging the reporting of future aggressive behaviors between the two parties. Therefore, the T-BIP also has a parent component designed to help facilitate home-school communication.

Cognitive-Behavioral Techniques to Reduce Aggression

Research on the effectiveness of using cognitive-behavioral techniques in an effort to reduce aggression has produced promising results. In their meta-analysis, Sukhodolsky, Kassinove, and Gorman (2004) examined the outcomes of cognitive-behavioral therapy (CBT) for aggressive children and adolescents. Analysis of 40 studies suggested CBT was effective in reducing aggressive symptoms with a medium mean effect size (Cohen's $d = 0.67$). The authors of the meta-analysis divided the studies into four groups according to therapeutic technique and calculated the mean effect size for each group. Results indicated three of the four cognitive-behavioral techniques were effective: skills development ($d = 0.79$), eclectic treatments ($d = 0.74$), and problem-solving treatments ($d = 0.67$). Eclectic treatments referred to treatments which used several cognitive-behavioral procedures and addressed two or more aspects of anger. The fourth technique, affective education (i.e., teaching about emotions), was significantly less effective ($d = 0.36$) than the skills development and eclectic treatments groups. Further analysis revealed that skills training and multimodal techniques were the most effective in

reducing experiences of anger in children and adolescents. Findings from this meta-analysis suggest that CBT techniques may provide youth with strategies which enable them to reduce their aggressive behaviors.

Cognitive-behavioral techniques may also help reduce aggression through the altering of cognitions (Lochman, Powell, Whidby, & Fitzgerald, 2006). Research over the past 30 years has repeatedly shown that aggressive youth have a hostile attributional bias toward neutral or nonhostile events (Dodge et al., 2003; Kupersmidt, Stelter, & Dodge, 2011); that is, these youth tend to assume that people are acting aggressively toward them, when they are not. This is true for the physically aggressive as well as relationally aggressive behaviors which frequently occur in bullying. A study by Lochman and Wells (2002) found mediating effects of altered cognitions for aggressive youth. Specifically, path analyses showed that the outcome effects of their CBT-based intervention program were partially mediated by the changed social-cognitive processes, schemas, and parenting processes. The T-BIP makes use of these findings by systematically measuring cognitive distortions which then inform intervention efforts. Thought distortions of participants in the T-BIP are assessed using the *How I Think Questionnaire* (HIT; Barriga, Gibbs, Potter, & Liau, 2001) during the assessment phase. Students who are overly aggressive, for example, may respond in a manner that suggests they minimize the damaging nature of their aggression and blame others for "causing" them to become angry. The therapist is then able to address students' thinking patterns in the specific situations which prompted the T-BIP referral. The T-BIP used data-based decision-making to understand, educate, and provide a solution-oriented plan to alter the student's bullying behavior.

CBT techniques have also been effective with students who suffer from more severe forms of aggression. In their review, Johnson and Waller (2006) examined several interventions designed to reduce aggression in youth who met the criteria for conduct disorder (CD) or oppositional defiance disorder (ODD). Several techniques were examined including interpersonal skills training (e.g., problem-solving, social, anger control), intrapersonal skills training (e.g., desensitization, imagery), multimodal treatment, and parent training. Results suggested that several interventions utilizing cognitive-behavioral techniques were efficacious. Interventions such as the T-BIP which utilize cognitive-behavioral techniques in one-on-one sessions with youth avoid this contagion effect from other aggressive youth. Johnson and Waller (2006) concluded that based on their findings, the best treatment for youth with CD or ODD is a multimodal approach that includes aspects of CBT in addition to parental involvement. The importance of parental involvement in combination with cognitive-behavioral interventions to reduce aggression has been supported by other studies in the field of aggression as well (Northey, Wells, Silverman, & Bailey, 2003; Southam-Gerow & Kendall, 2000).

The T-BIP is a promising tertiary intervention because its intensive, one-on-one nature allows for the therapist and student to identify and address the ecological factors that maintain the bullying behaviors. Furthermore, although the T-BIP is a time intensive program, by replacing suspension or reducing the length of the suspension, it allows students to spend more time in the classroom. Ideally, schools choosing to implement the T-BIP will do so in conjunction with effective primary and secondary behavioral supports. Following the PBIS model, a school may, for example, choose to implement the "Steps to Respect" curriculum as a Tier 1 support, run small social skills groups as Tier 2 support, and implement the T-BIP as Tier 3 support. In the next section we will present a de-identified sample T-BIP client, and we will present some preliminary data on the effectiveness of the T-BIP.

Sample Target Bullying Intervention Client

Kellen is a Caucasian 13-year-old female who lives with her mother, stepfather, four older brothers, three younger brothers, and younger sister. She was in the 7th grade at the time of the

Target Bullying Intervention Program and was referred by her school counselor. This referral was precipitated due to concerns with Kellen's behavior at school. Specifically, she was reported to physically bully other students, and her bullying behaviors had resulted in disciplinary actions, including two suspensions.

Assessment Results

Kellen completed the *Children's Depression Inventory* (CDI). Total raw scores of 19 (T-Score = 60) or greater indicate the potential for depression. Her total CDI score (T-Score = 39) fell into the nonclinical range, as did her scores on the Negative Mood (T-Score = 48), Negative Self-esteem (T-Score = 39), Interpersonal Problems (T-Score = 43), Ineffectiveness (T-Score = 38), and Anhedonia (T-Score = 41). These scores indicated that Kellen was not self-reporting experiencing clinically significant symptoms of depression.

She also completed the *Multidimensional Anxiety Scale for Children* (MASC), which is a self-report measure consisting of 39 items, which are designed to assess dimensions of anxiety in children ages 8 to 19. These items provide measures on four factors, including Physical Symptoms, Harm Avoidance, Social Anxiety, and Separation/Panic. These four factors are combined to provide a Total Anxiety score. T-Scores greater than 65 indicate levels of clinical anxiety. Her total anxiety score (T-Score = 45) fell into the nonclinical range, as did her scores on Physical Symptoms (T-Score = 34), Harm Avoidance (T-Score = 51), and Separation Anxiety (T-Score = 49). Kellen's score on Social Anxiety (T-Score = 57) fell into slightly above average range but was still within the nonclinical range. This indicated that social anxiety may be an area of relative difficulty for her. Overall, however, these scores indicated that Kellen was not self-reporting experiencing clinically significant symptoms of anxiety.

Kellen also completed the *How I Think Questionnaire* (HIT), which is a 54-item self-report measure that asks students to report how they think about things in their lives. Her total HIT score fell in the nonclinical range (<50%). Her scores on the Self-Centered (<50), Minimizing/Mislabeling (<50%), Assuming the Worst (<50%), Physical Aggression (<50%), Oppositional Defiance (<50%), Blaming Others (<50%), Lying (56%), and Stealing (<50%) subscales all fell into the nonclinical range. Notable items with which Kellen indicated that she agreed include "If I made a mistake, it's because I got mixed up with the wrong crowd," "Everybody lies, it's no big deal," "In the past, I have lied to get myself out of trouble," "I have done bad things I haven't told people about," and "I have taken things without asking." Her scores indicated that she was not experiencing any cognitive errors.

The *Thoughts About School* (TAS) questionnaire is a 34-item scale that measures aspects of school climate hypothesized to be related to bullying behaviors. For the items "There is a lot of graffiti written on school property (e.g., bathroom, outside walls)," "Lots of kids are afraid of bullies," "Many students get bullied," and "Bullying is a problem at my school," she indicated that she believed these were true at her school. Thus, Kellen believed that bullying was a problem at her middle school. Kellen also completed the *Self-Perception Profile for Children*, which assesses domain-specific judgments of competence and self-adequacy, as well as a global perception of worth or self-esteem. There are a total of 36 items on which she was asked to score each item on a scale from 1 to 4, where a score of 1 indicates low perceived competence, a score of 2.5 indicates medium perceived competence, and a score of 4 reflects high perceived competence. Kellen's scores on Global Self-Worth ($M = 3.67$), Scholastic Competence ($M = 3.67$), Athletic Competence ($M = 3.67$), Behavioral Conduct ($M = 3.50$), and Physical Appearance ($M = 3.33$) indicated high perceived competence. Her score on Social Acceptance ($M = 3.00$) indicated medium to high perceived competence. These scores suggested that Kellen exhibited high self-esteem overall while feeling slightly worse about her social acceptance. Her score on Scholastic Competence is consistent with

school reports of her grades (i.e., mostly Bs). Given school reports of Kellen's behaviors at school, her score on Behavioral Conduct was somewhat higher than might be expected. However, given her lower score on Social Acceptance, it appeared as though she recognized that she had problems with peer relationships.

Kellen also completed *The Bully Survey-Student Version* (BYS-S), which is a four-part survey that queries students regarding their experiences with bullying, perception of bullying, and attitudes toward bullying. In part A, students answer questions about when they were victims of bullying during the past year. Part B of the survey asks questions about the participants' observations of bullying behavior among their peers during the past year (bystander). Part C requests information from the participants about when they have bullied other students. Finally, Part D requires students to provide their general perceptions of bullying. Kellen self-identified as having been bullied, witnessed bullying, and bullying others. She indicated that she had bullied girls in the same grade in the gym one or more times per week. Kellen reported that she bullied by calling others names and by pushing/shoving, which made her and the students she bullied feel bad or sad. She indicated that she bullied others in order to "get revenge." When asked about her perceptions of bullying, Kellen reported that the items "Bullies make kids feel bad," "I feel sorry for kids who are bullied," and "Bullies hurt kids" were totally true.

Therapy Component

Kellen participated willingly throughout the session and acknowledged that she had bullied other students. She completed self-report measures, watched a video on bullying called *Stories of Us* (www.storiesofus.com), and participated in a PowerPoint presentation on bullying. She was also asked to complete the Draw a Bully activity and to complete a worksheet activity (i.e., Knowing My Anger) from the *Bully Busters* curriculum workbook designed to equip students with skills to handle future bullying situations. She shared her experiences, feelings, and beliefs about bullying incidents, attempted to recognize and understand various bullying behaviors and the reasons behind those bullying behaviors, and role-played positive alternatives for bullying behaviors. She had been suspended two times for bullying (slapping) other students. When speaking with the student therapist, Kellen shared examples of verbal bullying she had perpetrated but was more reluctant to discuss the physical bullying she had done. When discussing the reasons behind bullying, she acknowledged that the main reason behind her bullying was the desire for revenge. She expressed a great deal of empathy toward victims of bullying and appeared to be ashamed of and distressed by the bullying she had perpetrated. She knew many positive alternatives to bullying behaviors; however, she indicated that she often felt so angry toward other students that she would bully them even when she did not want to and knew she should not act this way. She was able to articulate the connection between her own experiences with bullying and what she learned from the PowerPoint presentation about bully victims and the cycle of aggression. Her involvement in bullying appeared to be caused by a desire for revenge and difficulty controlling her negative emotions, particularly anger.

Follow-up Report and Solution-Focused Meeting

Two weeks after the T-BIP, Kellen's mother, the school principal, her school counselor, and the T-BIP therapist met to complete the parent and teacher measures, review the report, and plan for ways Kellen can change her behavior. Interventions that can help Kellen to manage her negative emotions and to resolve conflicts using nonaggressive problem-solving strategies are likely to help her get out of the bullying dynamic. The T-BIP report ends with a list of data-based recommendations. The following recommendations

were made based on her self-report measures and her interactions with the therapist during the bullying intervention session:

1. Monthly individual cognitive-behavior therapy (CBT) to help Kellen better understand the connection between her thoughts, feelings, and behaviors, particularly with regard to the connection between her interpretation of the bullying she experiences, her feelings of anger, and her behaviors (i.e., seeking revenge by engaging in bullying behaviors).
   (a) Kellen would benefit from anger management therapy and techniques that assist her in recognizing her anger and the signs/symptoms that accompany it as well as ways to calm herself down. Relaxation strategies, such as deep breathing and muscle tensing/relaxation, may also help her to calm herself down when she becomes angry. By managing her anger better, Kellen may be better able to problem-solve when being bullied by her peers and to take more socially appropriate steps to ending the bullying.
   (b) Although the session focused on Kellen's relationships with peers at school, she mentioned that she has difficulty getting along with her siblings at home. If this is deemed to be an area of difficulty for Kellen and other members of the family, family therapy or filial therapy should be considered.
2. Kellen may benefit from checking in with her counselor or a trusted teacher at the end of every day to allow her to report on how her day was and to share information regarding bullying situations and personal successes. This would also provide an opportunity for her to anonymously report any bullying she experienced. Although these contacts may be brief, Kellen would further benefit from meetings with a counselor or trusted teacher to discuss specific events and to practice techniques she may be learning to help her deal with difficult peer interactions. Specifically, Kellen may benefit from practicing responding to other students who are bullying her or making her angry.
3. The adults in Kellen's life should help her to generate and utilize nonaggressive/nonthreatening problem-solving strategies. It is especially important that the adults in her life model using appropriate problem-solving strategies and methods of managing anger and other negative emotions.
   (a) It is recommended that a positive reinforcement system be used at school and in the home to reward Kellen for positive behaviors and the use of alternative strategies for problem-solving during times of conflict. This can be developed with Kellen, her parents, support teacher(s), and/or counselor.
   (b) A homeschool note would be a helpful way to link behaviors at school with behaviors at home in order to help find patterns in Kellen's behaviors. A homeschool note can also help adults at home and school to stay on the same page regarding consequences for Kellen and ways to support her.
4. Kellen reported that she bullied others in the gym. Thus, she may benefit from increased supervision when she is in the gym. Since competitive environments may make it more difficult for Kellen to control her emotions, she would benefit from a permanent pass that allows her to take a time-out from the activity in order to calm down before returning to the situation.
   (a) Kellen's gym teacher is encouraged to triage with her before and after gym class in order to gauge her emotions and remind her to use her pass if she feels that she needs time and space to regain control over her emotions.
5. Kellen reported lower self-competence in the area of social acceptance. Therefore, strategies to help her to build more positive relationships with her peers (e.g., encouraging Kellen to become involved in school clubs/activities) are warranted.
   (a) Given Kellen's high athletic competence, she may benefit from involvement in a school sports team. In addition to encouraging positive relationships between Kellen and her peers, sports often provide a healthy outlet for negative emotions, particularly anger.

(b) Given Kellen's report that she is the middle child of nine children, she may benefit from additional contact with an adult with whom she can build a trusting relationship and discuss problems she may be less comfortable sharing with parents and/or school staff members. Thus, participation in a mentoring program may be beneficial for her.

6. Kellen reported that she is most frequently bullied via Facebook and that she is also bullied via texting from going online/texting during school and outside of school. Therefore, Kellen would benefit from increased supervision when she is online and/or texting.
   (a) Kellen would also benefit from psychoeducation surrounding the dangers of cyberbullying and ways to keep herself safe while online, particularly on social media sites.

Preliminary Analysis of the Target Bullying Intervention

In order to examine the overall impact of the T-BIP, data have been collected on 78 students who participated in the T-BIP in elementary through middle school (4th through 8th grades). Of the 78 students, 52 were male and 26 were female and their ages ranged from 9 to 14 years old ($M = 11.81$; $SD = 1.08$). The racial distribution across the students was 65.4% Caucasian, 6.4% African-American, 14.1% biracial or multiracial, 6.4% Latino, 6.4% Native American, and 1.3% other races. These demographics are consistent with the overall school district population. Among the 78 students, 50 (64.1%) reported that they had been bullied during the school year, ranging from one or more times a day ($n = 17$), one or more times a week ($n = 14$), to one or more times a month ($n = 15$) (four missing values). Sixty students reported that they had seen a student who was bullied this school year, ranging from one or more times a day ($n = 22$), one or more times a week ($n = 23$), to one or more times a month ($n = 13$) (two missing values). Fifty-eight students reported that they had bullied other students this school year, ranging from one or more times a day ($n = 20$), one or more times a week ($n = 17$), to one or more times a month ($n = 16$) (five missing values).

Based on students' self- report on the three "Yes/No" questions ("Have you been bullied this school year?" "Did you ever bully anyone this school year?" and "Did you ever see a student who was bullied this school year?"), students were grouped according to status: (1) bully, (2) bully victim, (3) victim, (4) bystander, and (5) not involved. In the current study, based on students' self-report, 20 students self-identified as bullies, 12 as victims, 38 as bully/victims, three as bystanders, four as not involved, and one student answered "No" to both bullying and victimization question, but did not answer the question about seeing other students being bullied.

The number of office referrals for the students decreased significantly after the T-BIP intervention, $t(60) = 2.50$, $p = 0.02$. Specifically, the office referral mean decreased from 3.67 (S.D. = 3.90) to 2.30 (S.D. = 3.28). For pretreatment office referrals, boys ($M = 3.95$, $SD = 4.34$) received more office referrals than girls ($M = 3.14$, $SD = 2.89$), but the difference was not significant, $t(59) = -.77$, $p = .45$. Older students tended to receive more office referrals; specifically, 14-year-olds on average received 8 office referrals, 13-year-olds received 4.82 office referrals, 12-year-olds received 4.24 office referrals, 11-year-olds received 2.21 office referrals, 10-year-olds received 1.60 office referrals, and 9-year-olds received 0.67 office referrals. However, the difference was also not significant, $F(5, 55) = 2.29$, $p = .058$.

Most parents found the T-BIP as an acceptable treatment. Specifically, 47.1% of the parents who completed the survey rated the T-BIP as "very acceptable" for their general reaction to this intervention ($M = 5.78$, $SD = 1.50$, with 7 being "very acceptable"), and 37.1% of the parents rated the T-BIP as "very acceptable" for the students' problem behavior ($M = 5.80$, $SD = 1.18$, with 7 being "very acceptable"). Teachers also generally found the T-BIP as an acceptable treatment. Specifically, 47.8% of the teachers rated the T-BIP as "very acceptable" for their general

reaction to this intervention ($M = 5.80$, $SD = 1.18$, with 7 being "very acceptable"), and 44.7% of the teachers rated the T-BIP as "very acceptable" for the students' problem behavior ($M = 5.21$, $SD = 1.96$, with 7 being "very acceptable").

Conclusions Regarding Preliminary Impact T-BIP

Preliminary results from the T-BIP suggest that it is an acceptable treatment from the perspective of parents and teachers and the intervention significantly reduced the number of office referrals received by students who completed the intervention. Results also support the assertion that bullying is a mental health problem; students involved in bullying experience internalizing and externalizing problems and errors in thinking. Further research should continue to examine whether or not the T-BIP reduces these problems and errors in thinking over time. While there were no significant differences between the groups (i.e., bully, bully victim, victim) in terms of depressive symptoms, students who self-identified as bully victims had higher levels of social anxiety and overall anxiety. Bully victims and victims also had higher scores on harm avoidance, which assesses anxious coping symptoms. It stands to reason that students who are being bullied worry about this and strive to avoid upsetting behaviors. The students in the T-BIP endorsed higher levels of cognitive distortions, suggesting that cognitive distortions may be an important factor to consider when working with students who bully others. Students who self-identified as bully perpetrators had significantly higher scores than victims and bully victims on all the HIT subscales. Students who self-identified as bullies also endorsed high levels of social self-perception. Interestingly, these students are confident about their social behavior and may view bullying as a means to achieve social status (Rodkin, Farmer, Pearl, & Van Acker, 2006). This is also an important focus for intervention in that these bully perpetrators need help in channeling their social status in positive ways, not negative. Both bullies and bully victims reported understanding that their behavior was problematic. Indeed, they were referred to the T-BIP because of their bullying behaviors. The first step to changing behavior is the awareness that the behavior is a problem. In this regard, the T-BIP helps students, teachers, and parents understand the underlying dynamics of the bullying behaviors, and using a data-based decision-making model helps provide a roadmap for cognitive and behavioral changes.

It is important to keep in mind some limitations when reviewing the preliminary results from the T-BIP. The program was originally designed as an alternative to suspension with the plan that parents and students who did not choose the T-BIP could be used as a comparison group (i.e., suspension compared to T-BIP). However, in the 5 years that this intervention has been implemented, no parent has declined the T-BIP and opted for suspension in order to deal with bullying behaviors. Future plans for the T-BIP are to apply for grant funding so that students can be randomly assigned to suspension or to the intervention. Additionally, in the earlier years of the study, the total number of office referrals was collected before and after the date of the intervention. The dates of the office referrals were not recorded, limiting the ability to control for length of time before and after the date of the intervention.

Conclusions

In order to effectively prevent and intervene in bullying behaviors, a comprehensive PBIS framework should be implemented. A coordinated, structured set of strategies to create a positive school climate will be the foundation to preventing bullying; however, when bullying behaviors occur, helping those students change their behaviors will ultimately reduce levels of bullying among school-aged youth. Involvement in bullying is clearly linked to cognitive and psychological distortions and deficits. Teaching students the skills they need in order to successfully interact with others without having to use bullying behaviors will help create socially competent youth who will shape the next generation.

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School-Based Treatment for Anxiety in Children and Adolescents: New Developments in Transportability and Dissemination

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Anxiety disorders are the most common psychopathology in children and adolescents, affecting over 30% before adulthood (Merikangas et al., 2010). With median age of onset ranging from 6 to 14 years, anxiety disorders are among the earliest classes of psychopathology to develop (Costello, Egger, & Angold, 2005; Merikangas et al., 2010). Youth with anxiety disorders experience significant subjective distress and disability that negatively affects friendships, family relationships, and academic achievement (Grover, Ginsburg, & Ialongo, 2007; Langley, Bergman, McCracken, & Piacentini, 2004). Without intervention, anxiety disorders often run a chronic course and persist into adulthood (Costello et al., 2005), placing youth at risk for later mood and substance use disorders (Bittner et al., 2007; Costello, Mustillo, Erkanli, Keeler, & Angold, 2003). Thus, it is not surprising that anxiety disorders are among the most costly classes of mental health disorders (Rice & Miller, 1998), with direct and indirect costs estimated at over 42 billion dollars per year in the United States (Greenberg et al., 1999). The psychosocial and financial consequences of untreated anxiety disorders underscore the importance of effective and available treatments.

Several cognitive-behavioral treatments (CBT) for childhood anxiety disorders have been systematically evaluated and received empirical support (e.g., Beidel, Turner, & Morris, 2000; Kendall, 1994; Silverman et al., 1999). Despite these efforts, many anxious youth remain unidentified (Masia Warner, Fisher, Shrout, Rathor, & Klein, 2007), and more than 80% remain untreated (Merikangas et al., 2011). Even when anxious youth do come into contact with various health sectors, they may not receive mental health services. One recent study found that students identified as anxious based on a school-wide screening were significantly less likely than students with other mental health problems to have received follow-up care from a provider (Husky, Sheridan, McGuire, & Olfson, 2011). It has been shown that anxious youth seen by pediatricians are less likely to be referred for treatment than children with externalizing problems (Wren, Scholle, Heo, & Comer, 2005). Additionally, logistical barriers can prevent families from accessing

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community mental health services (e.g., long waitlists, high costs; Owens et al., 2002), and only a small percentage of these are evidence-based treatments (EBTs), such as CBT (Collins, Westra, Dozois, & Burns, 2004; Labellarte, Ginsburg, Walkup, & Riddle, 1999).

Because many anxious youth are not identified or referred, it follows that traditional mental health service delivery models (e.g., community mental health centers, independent practitioner offices) may not be sufficient to meet their treatment needs. Given the impairment and cost associated with anxiety disorders, it is imperative that researchers, clinicians, and policy makers explore alternate methods and venues for providing anxious youth with effective treatment (Weist, 1999).

Rationale for School-Based Anxiety Treatment

Schools have been increasingly recognized as a critical avenue for helping address the unmet mental health needs of youth with anxiety disorders (Masia Warner, Nangle, & Hansen, 2006). Implementing EBTs for anxiety in the school setting has several potential advantages. For example, partnering with schools to educate school personnel in identifying anxiety or implementing school-wide screenings may facilitate early detection and intervention (Fox, Halpern, & Forsyth, 2008; Weist, Myers, Hastings, Ghuman, & Han, 1999). Beyond increasing recognition, conducting treatments within the school setting minimizes barriers to accessing community services (Husky et al., 2011).

Moreover, the school environment is an ecologically valid setting for treating anxiety disorders. Common triggers of anxiety for youth are often found at school, ranging from worries about tests and class presentations to separating from caregivers and talking with new peers. Therefore, implementing treatment for anxiety disorders in schools provides opportunities to practice new skills and engage in exposure exercises in a real-world setting that may promote generalization (Evans, 1999; Evans, Langberg, & Williams, 2003). For example, children with class participation fears have a multitude of opportunities to work their way up a fear hierarchy in school, from answering a question in their favorite class to eventually volunteering in the class in which they are most nervous. Peers and teachers can also be enlisted to assist in exposure activities (e.g., requesting a teacher to call on the child to ensure repeated practice), while school-based treatment providers can be on hand to offer coaching and process the experience. In this way, treatment delivered in schools can reduce the divide between the clinical setting and the "real world."

Movement Toward Transportability and Dissemination to Schools

Inspired by the potential benefits of implementing anxiety treatments in schools, researchers have begun to develop, evaluate, and demonstrate support for several school-based CBT programs. Studies of these anxiety treatments can be classified along a continuum according to the degree to which researchers are involved in implementing the intervention (Chorpita, 2008). *Efficacy* studies conducted in the 1980s and 1990s showed that CBT was highly successful in treating child anxiety disorders in clinic and laboratory settings under controlled conditions (e.g., using highly trained and supervised therapists). This past decade witnessed an increase in *transportability* studies, which evaluate CBT programs delivered in school settings by research-based providers (e.g., doctoral-level psychologists or graduate students), under more real-world conditions, and with fewer exclusionary criteria placed on participation. In the past few years, *dissemination* studies have begun to emerge, representing an exciting advance in school-based anxiety treatment research. The aim of dissemination studies is to evaluate whether school-based providers, including specialized school mental health professionals (e.g., school social workers and school psychologists) and other school personnel (e.g., school guidance counselors and teachers), can be trained to effectively implement CBT programs.

This chapter will present five school-based treatments for anxiety that have been evaluated in controlled trials. *School-based trials implemented by research-based providers* have demonstrated

support for transportability to schools for most of these programs. More recently, a limited number of *school-based trials implemented by school-based providers* have examined whether these programs can be delivered by school personnel with limited background in CBT. In reviewing both types of school-based studies, we will describe the treatment programs, present clinical outcome data, and include available information on treatment fidelity or the degree to which an intervention is implemented as intended (Perepletchikova, Hilt, Chereji, & Kazdin, 2009). The order in which the programs are described reflects the types of anxiety they address; programs treating a range of anxiety problems are presented first, followed by programs treating specific anxiety disorders (e.g., social phobia). We will conclude by highlighting critical next steps the field must address to successfully disseminate school-based interventions.

FRIENDS

Program Overview

FRIENDS is a group-based cognitive-behavioral anxiety prevention program for school-age youth (Barrett & Turner, 2001). Adapted from Coping Koala (Barrett, Dadds, & Rapee, 1996), an Australian adaptation of Coping Cat (Kendall, 1994), FRIENDS has been shown to be efficacious in the treatment of clinically anxious youth (Shortt, Barrett, & Fox, 2001). In a group format, children are taught skills and techniques for coping with anxiety, including emotion recognition and regulation, relaxation, cognitive restructuring, problem solving, and in vivo exposure. The acronym "FRIENDS" assists children in remembering the program's core skills: F ("Feeling worried"), R ("Relax and feel good"), I ("Inner thoughts"), E ("Explore plans of action"), N ("Nice work, reward yourself"), D ("Don't forget to practice"), and S ("Stay cool!"). FRIENDS consists of 10 weekly group sessions (approximately 1-hour long), as well as two booster sessions conducted 1 month and 3 months after the final group. Four sessions conducted at regular intervals during the program give parents an opportunity to learn about the program and parenting strategies to promote anxiety management. The FRIENDS program manual and other materials are available for purchase at www.australianacademicpress.com.au/friends.

School-Based Trial of FRIENDS with Research-Based Providers

Although most often evaluated in a curriculum-based format applied universally to entire classes of schoolchildren, FRIENDS has also been investigated within an indicated prevention framework for children deemed "at risk" for anxiety disorders based on the presence of mild to moderate anxiety symptoms. Dadds and colleagues (Dadds et al., 1999; Dadds, Spence, Holland, Barrett, & Laurens, 1997), for example, compared Coping Koala ($n=61$), the precursor to FRIENDS, to a no-treatment control group ($n=67$) in a sample of 128 children between the ages of 7 and 14. Parents of children who received elevated scores on an anxiety self-report measure as part of a school-wide screening, or who were nominated by their teachers, were invited to complete an in-person diagnostic interview. Children were eligible to participate if they received a diagnosis of an anxiety disorder at a mild to moderate severity level or if they had features of an anxiety disorder that did not meet criteria for a disorder (e.g., subthreshold). The Coping Koala intervention was delivered over 1–2-h weekly sessions in groups of five to twelve students. Program leaders were trained clinical psychologists assisted by one to two clinical psychology graduate students, who completed a 1-day training session and received weekly supervision by program leaders.

Overall, findings were mixed. No group differences in anxiety diagnoses were found immediately following intervention, with both groups showing improvement. However, differences emerged over time, with fewer children in the intervention group (~25%) meeting criteria for anxiety diagnoses relative to controls (~60%) at 6-month follow-up. In addition, children with anxious features, but without baseline diagnoses, progressed to clinical diagnoses by 6-month follow-up at differing rates (16% of intervention

and 54% of controls). At 12-month follow-up, rates of anxiety diagnoses were equivalent across study groups (37% for intervention and 42% for control), though group differences were again observed at 24 months (20% for intervention and 39% for controls).

An extension of the work by Dadds and colleagues, Bernstein, Layne, Egan, and Tennison (2005) evaluated a modified version of FRIENDS that added nine weekly group parent training sessions, also conducted in school. Discussion centered on the bidirectional relationship between the child's anxiety and the family system. In addition to learning behavioral strategies to encourage their children to face their fears, parents were taught how to manage their own anxiety in order to become a more effective coach and model. The child group portion was shortened by one session, though no content was lost. In the RCT, 61 children between ages 7 and 11 with mild to moderate symptoms of separation, generalized, or social anxiety disorder (either meeting the criteria or subthreshold) were randomized to FRIENDS ($n=17$), FRIENDS plus parent training ($n=20$), or a no-treatment control ($n=24$). Both FRIENDS groups were delivered by experienced CBT therapists who were part of the research team. Overall, results demonstrated superiority of both active treatments compared to no treatment based on clinician-, child-, and parent-report measures at post-treatment (Bernstein, Layne, Egan, & Tennison, 2005) and at 3-, 6-, and 12-month follow-ups (Bernstein, Bernat, Victor, & Layne, 2009). However, because few significant differences were found between the two FRIENDS conditions, it is unclear whether there is added benefit of parent training.

School-Based Trials of FRIENDS with School-Based Providers

Recent years have been marked by initial attempts to disseminate FRIENDS via two controlled studies that examined the effectiveness of FRIENDS when delivered by school-based personnel for children reporting elevated anxiety symptoms (Hunt, Andrews, Crino, Erksine, & Sakashita, 2009; Miller et al., 2011). Hunt and colleagues, 2009 compared a nine-session version of FRIENDS ($n=136$), led by a school counselor assisted by a support teacher, to a no-treatment control ($n=124$) in a sample of children ages 11–13. Miller and colleagues (2011) compared a ten-session version of FRIENDS ($n=64$), led by a teacher and either a school counselor or psychology graduate student, to an attention-control group ($n=125$) in a sample of fourth through sixth graders (mean age = 10.1). Approaches to training and supervision differed. Hunt and colleagues provided a 2-day training workshop without ongoing supervision, while Miller and colleagues provided 6 h of in-school training followed by weekly meetings with the research team to review session goals. With respect to treatment fidelity, research staff in Hunt et al. listened to session recordings (obtained at 4 of 10 schools where FRIENDS was delivered) and rated 55% of selected sessions as having met the stated aims either moderately or extremely well. In sharp contrast to research staff ratings, FRIENDS program leaders self-rated about 94% of selected sessions as having met that same standard. In Miller et al., two trained graduate students blind to study conditions rated adherence of 25% of group sessions. Adherence to program objectives was reported to be nearly 80%.

Outcomes were disappointing in both studies. Compared to their respective controls, no differences were observed on self-report measures of anxiety symptoms immediately following intervention. Additionally, Miller et al. found no post-intervention group differences on parent or teacher reports. Hunt et al. found no differences at a 2-year follow-up, though greater reduction in self-reported anxiety symptoms for FRIENDS was obtained on one measure at a 4-year follow-up. It is possible that inadequate treatment fidelity contributed to the lack of significant effects. In fact, Hunt and colleagues suggest that their use of training workshops alone may have been insufficient for achieving high-quality program implementation, an assertion consistent with the literature on training community clinicians (e.g., Beidas, Barmish, & Kendall, 2009; DeViva, 2006). However, given the limited nature of treatment

integrity data in both studies (adherence ratings only on a small sample of treatment sessions), it is difficult to draw conclusions regarding the relationship between therapist competence and clinical outcomes. In summary, while FRIENDS may have potential as a universal prevention program, it remains unclear whether it is an effective option for treating anxious youth in schools, particularly when delivered by school personnel.

Cool Kids

Program Overview

Cool Kids is a cognitive-behavioral group intervention for children between ages seven and 12 with anxiety symptoms (Mifsud & Rapee, 2005). Unlike FRIENDS, Cool Kids was specifically designed as an indicated intervention. Adapted from a previous treatment program for youth with clinical anxiety disorders (Rapee, 2000), Cool Kids is comprised of eight weekly sessions (60 min long) conducted during school hours in small groups of approximately eight to ten children. Initial sessions emphasize psychoeducation and cognitive restructuring, while later sessions focus on graduated exposure to feared situations. Children are also taught skills for problem solving, social interaction, handling bullying or teasing, and increasing assertiveness. Two additional sessions for parents offer information about the program and behavior management skills. The Cool Kids therapist manual is available for purchase at www.emotionalhealthclinic.com.au.

School-Based Trial of Cool Kids with Research-Based and School-Based Providers

Mifsud and Rapee (2005) examined Cool Kids in a sample of 91 children (ages 8–11) recruited from nine schools in socioeconomically disadvantaged communities in Australia. Children with elevated self-reported anxiety scores on school-wide screenings were included. Nine schools were randomly assigned to Cool Kids ($n=51$) or a waitlist control ($n=40$). Each Cool Kids group was delivered by a school counselor paired with a community mental health therapist hired by the research team. All group leaders received a full day of training but did not receive ongoing supervision. Data on treatment fidelity was not reported. The Cool Kids group exhibited greater reductions in self-reported and teacher-reported anxiety symptoms at post-treatment and at 4-month follow-up, when compared to the control. These findings are promising, though further research is needed to evaluate the effectiveness of Cool Kids when delivered exclusively by school personnel.

Baltimore Child Anxiety Treatment Study in the Schools (BCATSS)

Program Overview

BCATSS was designed to evaluate the feasibility and utility of school-based CBT tailored for anxious youth in inner-city, low-income, and predominantly African American communities, a population with typically unmet mental health service needs (Ginsburg, Becker, Kingery, & Nichols, 2008). Utilizing an individual format, the 10-session treatment in BCATSS features modifications for this population, such as providing culturally relevant examples and making traditional CBT techniques more interactive. Each session is approximately 35 min in length and designed to be delivered by school-based mental health clinicians. BCATSS utilizes a manualized treatment with a modular protocol, such that therapists have flexibility in choosing which core CBT skills ("modules") to implement in a given session based on the needs of the child. Modules include psychoeducation, contingency management, relaxation, exposure, cognitive restructuring, problem solving, and relapse prevention.

School-Based Trial of BCATSS with Research-Based Providers

In an initial controlled study preceding BCATSS, Ginsburg and Drake (2002) randomly assigned 12

clinically anxious African American adolescents (ages 14–17) from inner-city Baltimore to either a school-based CBT ($n = 6$) or attention-support (AS; $n = 6$) condition. In contrast to the newer modular/individual approach of BCATSS, Ginsburg and Drake utilized a group format. Two advanced psychology graduate students trained in CBT served as program leaders. Both the CBT and AS conditions met for 10 group sessions during regular class periods (45–50 min in length) at the same school. Results supported the efficacy of school-based CBT for this population, with 75% of the CBT participants no longer meeting criteria for their primary anxiety diagnosis at post-treatment, compared to 20% of the AS participants. Clinician-rated impairment and self-rated anxiety levels were lower in the CBT condition at post-treatment.

School-Based Trial of BCATSS with School-Based Providers

Building on this initial pilot study, BCATSS was developed to test the effectiveness of CBT for inner-city African American youth when delivered by school-based mental health clinicians with limited prior background in CBT. BCATSS therapists are social workers and doctoral-level psychologists who each serve as the full-time clinician at their respective schools. In the ongoing RCT designed for BCATSS, children (ages 7–12) are referred by school personnel or parents and invited to enroll if they have a primary diagnosis of social anxiety disorder (SAD), separation anxiety disorder, generalized anxiety disorder, or specific phobia. Children are assigned to either the 12-session individual CBT program described earlier or treatment as usual (TAU). In addition to attending a 2-day training covering anxiety symptoms and the CBT modules, clinicians receive weekly supervision. The TAU condition is conducted individually by the same clinician administering the CBT condition in his or her school, with careful monitoring of treatment contamination integrated in study procedures. Although outcome data has not yet been published, positive findings from BCATSS may aid in efforts to integrate anxiety treatment into schools and meet the mental health needs of anxious youth from diverse backgrounds.

Skills for Academic and Social Success (SASS)

Program Overview

Skills for Academic and Social Success (SASS; Masia et al., 1999) is a cognitive-behavioral group treatment for adolescents with SAD designed for delivery in school settings. Adapted from Social Effectiveness Therapy for Children, an efficacious group treatment for children with SAD (Beidel et al., 2000; Beidel, Turner, Young, & Paulson, 2005), SASS similarly emphasizes exposure and social skills training but includes modifications for an adolescent population (e.g., age-appropriate social skills, addition of cognitive restructuring) and the school environment (e.g., fewer/shorter sessions, involvement of teachers, parents, and school peers). SASS consists of 12 weekly group school sessions, two individual meetings, two parent meetings, two teacher meetings, four social events, and two booster sessions (Ryan & Masia Warner, 2012). Group sessions, each lasting a roughly 40-min class period, focus on three core components: (1) cognitive restructuring (realistic thinking); (2) social skills training, including initiating and maintaining conversations; and (3) in vivo exposure to feared social situations, which are often integrated in the school environment (e.g., talking with teachers or classmates in the lunchroom). Individual meetings provide group members the opportunity for problem solving around obstacles to treatment and conducting additional exposure exercises. Social events bring group members and outgoing peers together in natural community "hangouts" (e.g., bowling) to facilitate real-world exposure and skills generalization. Parent meetings educate parents about the cognitive, physiological, and behavioral markers of social anxiety, along with strategies for managing their child's social anxiety, including preventing avoidance and rewarding non-anxious behavior.

Teacher meetings educate teachers about social anxiety and the goals of SASS, obtain information about areas of difficulty for participating students, and enlist their help with potential classroom exposures (e.g., answering questions in class).

School-Based Trials of SASS with Research-Based Providers

To date, SASS has been evaluated in two randomized controlled trials. First, Masia Warner et al. (2005) compared SASS ($n = 18$) to a waiting-list control group ($n = 17$) in a sample of 35 adolescents (ages 13–17) with SAD recruited from two urban parochial high schools. SASS groups were co-led by a clinical psychologist and a psychology graduate student. Findings supported the SASS intervention, with 94% of SASS participants classified as responders based on their improved functioning at post-treatment versus only 12% of the control group. Furthermore, 67% of SASS participants, compared to only 6% of controls, no longer met criteria for a diagnosis of SAD at post-intervention. Significantly lower scores were observed for the SASS group at post-treatment and 9-month follow-up with respect to clinician-rated diagnostic severity and adolescent self-reported social anxiety and social avoidance.

In a second controlled trial designed to test the specific efficacy of SASS, Masia Warner et al. (2007) randomly assigned 36 adolescents (ages 14–16) with SAD to either SASS ($n = 19$) or a credible attention control ($n = 17$). A group program identical in time and professional attention, the attention control excluded elements related to the core components of SASS (e.g., exposure, social skills), instead focusing on relaxation training and four social events without outgoing peers. Results demonstrated superiority of the SASS condition. Over 82% of SASS participants were responders, compared to 7% of attention-control participants. While all controls still qualified for SAD diagnoses at post-treatment, this was only true for 41% of SASS participants. Students receiving SASS also exhibited significantly lower clinician-rated social anxiety severity and greater overall improvement at posttreatment and 6-month follow-up.

School-Based Trials of SASS with School-Based Providers

With SASS showing efficacy as a school-based treatment for adolescent SAD, attention has turned to examining whether SASS can be delivered effectively by frontline school personnel. In a preliminary study by Miller et al. (2011), teachers implemented a modified version of SASS, which consisted of only two social events and no parent or teacher meetings. Participants included 27 students (ages 13–17) nominated by a variety of sources (teachers, counselors, parents, etc.) due to anxiety-related concerns. SASS groups were co-led by a teacher and a student peer counselor selected by school staff. Program leaders received 6 h of training in the intervention, followed by weekly supervision while delivering the program (e.g., telephone contact with the research team). Results showed initial promise, as participants reported significantly reduced social anxiety symptoms and behavioral avoidance from pre- to post-treatment. Participants also reported satisfaction with the SASS program. Teachers and peer counselors who led the intervention likewise reported a positive experience, though some felt overwhelmed by the amount of information they had to learn.

To provide a robust test of its effectiveness and disseminability to school settings, Masia Warner and colleagues are currently conducting a large, federally-funded randomized controlled trial (RCT) of SASS as led by school guidance counselors (Masia Warner, Ryan, Colognori, Fox, & Herzig, 2011). This study will examine whether school personnel without specialized training in CBT can deliver a cognitive-behavioral intervention with treatment fidelity. Positive findings would underscore the disseminability of SASS and point to a model for promoting evidence-based care for underserved youth with SAD, as well as other mental health disorders.

Cognitive-Behavioral Intervention for Trauma in Schools (CBITS)

Program Overview

Cognitive-Behavioral Intervention for Trauma in Schools (CBITS; Stein et al., 2003) is a school-based group treatment for children and adolescents with previous trauma exposure (excluding sexual abuse) and clinically significant symptoms of PTSD and depression. Treatment components of CBITS include psychoeducation, relaxation skills, adaptive coping skills, cognitive restructuring techniques, graduated imaginal exposure to traumatic memories, processing of traumatic memories, and social problem-solving skills. The program typically consists of 10 one-hour weekly group treatment sessions (five to eight students per group), one to three individual sessions, two optional parent education meetings, and one teacher education meeting (Jaycox, Morse, Tanielian, & Stein, 2006; Stein et al., 2003). Imaginal exposure through writing and drawing is initially conducted in individual sessions and subsequently in the group. The CBITS therapist manual is available for purchase at store.cambiumlearning.com.

School-Based Trials of CBITS with School-Based Providers

As CBITS was designed specifically to be delivered by school-based mental health professionals, no studies have been reported evaluating the treatment as delivered by research-based providers. Two controlled trials, however, have demonstrated the effectiveness of CBITS when implemented by school psychiatric social workers (Kataoka et al., 2003; Stein et al., 2003). Both studies compared CBITS to a waitlist condition in youth with clinically significant PTSD symptoms secondary to exposure to community violence. First, Kataoka and colleagues (2003) examined CBITS in third through eighth graders recently emigrated from Spanish-speaking countries. CBITS was adapted slightly by reducing group sessions from ten to eight and increasing parent sessions, which focused on themes of loss and separation common to immigration, from two to four. Among youth with clinical levels of PTSD symptoms, findings indicated greater reductions at post-treatment for the intervention group ($n=152$) compared to the waitlist control ($n=47$). Second, Stein and colleagues (2003) found similar results in their evaluation of CBITS in a sample of sixth grade students. At post-treatment and 6-month follow-up, the CBITS group ($n=61$) reported significantly lower PTSD symptoms than the waitlist control ($n=65$). Treatment fidelity was evaluated by an independent rater on a subset of randomly selected audiotapes for an unknown percentage of group sessions. The mean rating of completion of session-specific intervention components was 96%, and the quality of implementation was classified as "moderate to high." Taken together, these studies support the effectiveness of CBITS for PTSD symptoms in an urban multicultural population.

The feasibility of CBITS was further supported by a field trial conducted with fourth to eighth grade students in New Orleans 15 months post-Hurricane Katrina (Jaycox et al., 2010). A total of 118 youth with elevated PTSD symptoms were randomized to the school-based CBITS group intervention ($n=58$) or to 12 sessions of Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT) with both parent and child at a local community mental health center ($n=60$). Both conditions were delivered by therapists trained in the respective treatment, though no information was provided regarding therapist background or treatment fidelity. Youth in both treatments indicated significantly lower PTSD scores at 10-month follow-up, with no significant difference between treatments. Importantly, this study found that CBITS was more feasible for this population, as 98% of youth randomized to CBITS enrolled in treatment versus only 23% of youth assigned to TF-CBT. This underscores the greater ability of school-based treatments to reach and retain distressed youth compared with interventions delivered in traditional mental health settings.

Support for Students Exposed to Trauma (SSET)

To increase its accessibility, the authors of CBITS created Support for Students Exposed to Trauma (SSET), an adaptation of CBITS designed to be implemented by school counselors and teachers (Jaycox, Langley, & Dean, 2009). SSET delivers the cognitive-behavioral components of CBITS in ten 45-min class periods, differing from CBITS due to its lesson plan format and lack of individual and parent meetings. Although SSET is designed to be delivered by school counselors and teachers, the authors strongly recommend having support from a mental health clinician for identifying students appropriate for SSET and addressing any treatment difficulties. The SSET program manual is available for purchase at www.rand.org.

SSET has been evaluated in one study to date. Jaycox, Langley, Stein, and colleagues (2009) compared SSET ($n=39$) to a waitlist control ($n=37$) in 76 sixth to eighth grade students with moderate levels of PTSD symptoms related to exposure to violence in the past year. Each SSET group was led by either a teacher or a school counselor, who completed a 2-day training with an expert clinician and received weekly or biweekly supervision during the study. Treatment fidelity was measured based on 16% of audiotaped sessions rated by independent evaluators. Ratings suggested that SSET was delivered with high coverage of session components and high quality, defined as strong ability to convey empathy, motivate students, present agendas, and review lessons. Results indicated that the SSET group showed small decreases in self-reported PTSD and depressive symptoms at 3-month follow-up that appeared to be more substantial than the waitlist control. The small sample size, however, resulted in limited statistical power to detect effects. Satisfaction ratings of parents and students involved in the program were high. Although additional studies are needed, these preliminary findings suggest that SSET is an intervention that can be delivered by school personnel to address the sequelae of exposure to violence in youth.

Summary

Findings from studies of five intervention programs suggest that there is promise for delivering EBTs for anxious youth in school settings. School-based treatment trials implemented by research-based providers have demonstrated support for transportability to schools. The evaluation of programs delivered by school-based providers is in its infancy, and drawing conclusions about potential effectiveness would be premature. Integration of interventions into school-based mental health clinics staffed by trained clinicians appears to be a promising approach; the ongoing trial of BCATSS by Ginsburg and colleagues will inform on its benefits. This model, however, may be limited in scope because school-based mental health clinics are few in districts nationwide. Another important avenue is to evaluate the effectiveness of EBT delivery by school counselors (e.g., guidance or student assistance) who are available in schools nationally but lack specialized mental health training (Ryan & Masia Warner, 2012). The current investigation of SASS delivered by school guidance counselors by Masia Warner will highlight the value of this potentially cost-effective approach. Overall, existing studies have failed to collect adequate data on the quality of intervention implementation or on the efficacy of various training models. To advance the dissemination of EBTs to front line school providers, it will be essential to understand factors that influence the effectiveness and sustainability of this approach.

Critical Future Directions

Although previously neglected, treatment fidelity, or the degree to which treatments are implemented as intended, is central to establishing the effectiveness of school-based treatments delivered by frontline school personnel. Used interchangeably with the term treatment integrity, fidelity consists of two main components: *adherence*, which refers to the application of treatment procedures, and

competence, which refers to the therapist's skill in delivering treatment (Perepletchikova et al., 2009). It is generally assumed, but inconclusively demonstrated, that therapist adherence and competence are related to therapeutic effect (Hogue et al., 2008; Perepletchikova & Kazdin, 2005). Thus, the diminished treatment effects observed in community-based EBTs have often been attributed to reduced treatment fidelity by frontline providers (Weisz, Donenberg, Han, & Weiss, 1995). Demonstrating that school-based personnel, particularly those with less specialized mental health training, can implement EBTs as intended is critical to establishing effectiveness when delivered in a community setting and has been characterized as part of the "next generation of implementation research" (McLeod & Islam, 2011).

Measuring fidelity presents many complex issues, however. Psychometrically sound measures of fidelity are limited, and there are no standard fidelity measures for treatments implemented by school personnel. In addition, an important question is *who* should rate fidelity. The current gold standard relies on costly independent evaluators, who must have a certain level of familiarity with the EBT in order to rate fidelity. This approach is clearly not feasible for wide-scale dissemination, yet self-ratings from community providers show poor agreement with independent observers (Carroll et al., 2000). Therefore, the development of reliable and valid measures and procedures for monitoring ongoing fidelity in school settings will be essential.

The lack of standardized, validated assessment instruments in this field is partially due to our limited understanding of the critical treatment features. Given that the "active ingredients" of many EBTs have yet to be identified, it is unclear which treatment-specific techniques (e.g., exposure) and nonspecific characteristics (e.g., warmth, timing) warrant monitoring. Thus, fidelity research represents an opportunity to illuminate the most critical elements of EBT delivery by examining links between treatment ingredients and clinical outcomes (Dobson & Singer, 2005; Kazdin & Nock, 2003). Such investigations also have the potential to identify criterion levels of fidelity sufficient for promoting effective treatment delivery to replace the current practice of applying an arbitrary cutoff of 80% (Perepletchikova & Kazdin, 2005).

Improving our understanding of the relationship between fidelity and treatment outcome also has important implications for developing training and supervision approaches that promote high fidelity of EBTs and are still feasible for dissemination (Weisz, Ugueto, Herren, Afienko, & Rutt, 2011). Tailoring training and supervision to emphasize only the most critical treatment components may improve effectiveness while also minimizing costs and resources. Currently, the standard training approach includes a workshop followed by ongoing supervision with an expert. Training workshops alone, while cost-effective, may increase therapist knowledge but do not influence therapist skill or behavior (e.g., Beidas et al., 2009; DeViva, 2006). Ongoing supervision during treatment implementation appears critical to promoting therapist skill acquisition and maintenance (Mannix et al., 2006; Miller, Yahne, Moyers, Martinez, & Pirritano,, 2004; Sholomskas et al., 2005); however, we know little about the parameters of effective supervision. Should training emphasize the conceptual basis of CBT or simply focus on practical teaching of specific treatment techniques? In addition to understanding active ingredients of training and supervision, it will be important to identify the minimum dose necessary for the effective delivery of EBTs (Beidas & Kendall, 2010).

Given that our "gold standard" of weekly supervision of school personnel by experienced clinicians is costly and impractical (Rakovishik & McManus, 2010), finding alternative strategies to maintain skills over time is essential. One option may be pyramid training (e.g., Demchak & Browder, 1990), in which one school personnel would be intensively trained to deliver an EBT for anxious youth and supervise his or her colleagues. However, there is some concern about "watering down" effects with school staff supervised by trained school personnel possibly showing deteriorating implementation fidelity. Another avenue for reducing costs and increasing feasibility may be the utilization of computer software and distance learning. Khanna and Kendall (2008, 2010)

have developed a computer-assisted version of Kendall's Coping Cat program referred to as Camp Cope-A-Lot that has shown feasibility and initial efficacy and may be a practical option for implementation by school personnel. In addition, telemedicine technology (e.g., live teleconferencing) has been initiated for the dissemination of EBTs for other childhood disorders, such as disruptive behavior and autism spectrum disorders (e.g., Funderbunk, Ware, Altshuler, & Chaffin, 2008; Vismara, Young, Stahmer, Griffith, & Rogers, 2009). Additional research will be needed to evaluate these approaches in training frontline school professionals.

Conclusion

School-based programs are considered a promising avenue for addressing the high rates of anxious youth who do not receive treatment. With the efficacy of cognitive-behavioral treatments for anxiety disorders now well documented, recent years have been marked by movement toward enhancing their accessibility through evaluating their transportability and dissemination to school settings. Of the treatments described in this chapter, studies examining their *transportability* have largely supported their feasibility and effectiveness when delivered in schools by *research-based providers*, typically specialized psychologists. An increasing number of *dissemination* studies have begun to test the effectiveness of these treatments when delivered by *school-based providers*, such as school-based mental health clinicians (e.g., school psychologists and school social workers) and other less specialized school personnel (e.g., school counselors and teachers). However, these studies are fewer in number and have produced mixed evidence, possibly due to the lack of attention to monitoring treatment fidelity. Further research is needed to better understand the link between fidelity and outcome, as well as to evaluate training and supervision models that can promote the effectiveness and sustainability of EBTs in schools. In doing so, these steps will bring us closer to addressing the unmet mental health needs of anxious youth.

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School-Based Interventions for Depression

Puja G. Patel, Kevin D. Stark, Kristina L. Metz, and Kelly N. Banneyer

Overview

This chapter provides a discussion of school-based interventions aimed at treating youth with depression. The authors give an overview of depression in youth, including its clinical presentation in children and assessments that can be used to diagnose and monitor the disorder within the framework of a school setting. Also, the authors provide a review of school-based interventions with a focus on indicated programs. The ACTION (Stark & Kendall, 1997) program is one such school-based intervention, and the authors give a discussion of the treatment components involved in this program. Finally, this chapter covers issues related to transportability of cognitive behavioral treatment (CBT) programs for youth into the schools, with a focus on school commitment, treatment parameters, environmental constraints, and training school staff.

School-Based Interventions

Overview of Youth Depression

Depression is a significant mental health concern among youth. Recent reports of the prevalence rate for depression in childhood range from about 1 % to 3 % (Costello, Erklani, & Angold, 2006) and increase in prevalence to approximately 8.3 % during adolescence (Substance Abuse and Mental Health Services Administration [SAMHSA], 2009). During childhood, depression affects both genders equally (Costello et al., 2006; Goodyer, 2010); however, during adolescence, there is a sharp increase in the prevalence of depression among females to nearly a 3:1 ratio compared to males (SAMHSA, 2009). Not only does depression have a recurrent course, but youth depression is also a strong predictor of depression in adulthood and of long-term functional disability (Weissman et al., 1999). Youth suffering from depressive disorders are at an increased risk for academic underachievement, suicidal crises, substance abuse, and somatic symptoms (Waslick, Kandel, & Kakouros, 2002). Most concerning, depressed youth are at an increased risk for suicide, which is the third leading cause of death in adolescence (Gould et al., 1998). Therefore, effective treatment of depression among youth is imperative. The predominant setting in which depression is most likely to be detected and effectively treated is within the school.

Clinical Presentation

Youth depressive symptoms manifest within the school setting and can often impede academic

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performance, decrease self-esteem, and hinder the formation of peer relationships (Kaltiala-Heino, Rimpelae, & Rantanen, 1998). Symptoms of depression for youth can include sadness, irritability, withdrawal, loss of interest in activities (anhedonia), changes in eating and sleeping habits, feelings of worthlessness, lack of motivation, fatigue, difficulty concentrating, and thoughts of death or suicide. Specifically, the symptom of decreased concentration has been found to undermine learning (Fröjd et al., 2008). Children with high levels of depression struggle with tasks requiring immediate recall of learned material and often require more repetition to learn new material (Lauer et al., 1994). Symptoms of decreased energy and fatigue paired with negative cognitive distortions also contribute to low motivation to complete school tasks as well as negate class participation (Livingston, Stark, Haak, & Jennings, 1996). A decrease in school performance often leads students to develop a low academic self-esteem and form beliefs that one is unable to be successful (Masi et al., 2001; Stark, Ostrander, Kurowski, Swearer, & Bowen, 1995). Additionally, students with depression who experience anhedonia are less likely to engage in pleasant events and activities which can perpetuate their depression and isolation from peers (Joiner, Lewinsohn, & Seeley, 2002). Depressed students often have poor social connections needed for the development of emotional well-being (Vitaro, Pelletier, Gagnon, & Baron, 1995).

Assessment of Depression

The goal of assessment is to identify students with key symptoms and the functional impairment of the illness. The World Health Organization (2003) has emphasized the importance of identifying depression among youth due to the increased risk for poor academic functioning, compromised social functioning, and risk of suicidality. Thus, identification within a school setting has become increasingly important.

The use of evidence-based assessment procedures is recommended prior to treatment initiation to adequately prepare a treatment plan. Multiple methods have been developed to assess for depression in children and adolescents. Commonly used assessment methods include self-report measures, parent and teacher questionnaires, diagnostic interviews, observational methods, and projective techniques. Children tend to be accurate reporters of subjective depressive symptoms such as worthlessness, anhedonia, and sadness, which can be captured by self-report (Kazdin, 1982; Kendall, Cantwell, & Kazdin, 1989). Based on the review of school-based interventions, self-report measures have been identified as reliable and valid indicators of the severity of depressive symptoms within a school setting (Carnevale, 2011). These include the Beck Depression Inventory—Youth (BDI-Y; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), the Children's Depression Inventory (CDI; Kovacs, 1985), the Center for Epidemiologic Studies—Depression Scale (CES-D; Radloff, 1977), and the Reynolds Adolescent Depression Scale (RADS; Reynolds, 1987). Of these four self-report measures, the BDI-Y and the CES-D were recommended to use within a school setting due to the affordability as well as ease of administration and scoring (Carnevale, 2011). Administration of self-report measures can be conducted by mental health professionals, school nurses, or school staff following the appropriate training of the layout, structure, and cutoff scores of the self-report instrument. Benefits to using self-report measures include quick administration, variable administration format including groups or individuals, and sensitivity to change in depressive symptoms.

Structured or semi-structured interviews are used to provide more detailed information and precise determination of the presence and severity of a depressive disorder. As children generally tend to be less accurate reporters of the duration and onset of symptoms (Stark, Sander, Yancy, Bronik, & Hoke, 2000), it can be beneficial to include a caregiver interview to provide a more accurate timeline of the illness (Stark, 1990). However, it is important to note that diagnostic interviews are both time intensive and require extensive clinical training. School-based interventions have utilized the Bellevue Index of

Depression (BID; Petti, 1978), the Computerized Diagnostic Interview Scale for Children (C-DISC-IV; Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000), the Revised Children's Depression Rating Scale (CDRS-R; Poznanski & Mokros, 1996), and the Schedule for Affective Disorders and Schizophrenia for School Age Children (6–18 years)—Kiddie-SADS (K-SADS; Ambrosini & Dixon, 2000) for assessment.

It may also be important to assess for comorbid anxiety symptoms. In the ACTION study, depressed youth with comorbid anxiety symptoms were found to have increased depression severity and lower functioning compared to participants with only depressive symptoms (Hamilton, 2009; Stark, 2010, 2011). However, the comorbid anxiety was not related to negative treatment outcome for these participants and that youth with comorbid anxiety actually experienced larger reductions in depression severity over the course of treatment than youth without comorbid anxiety (Hamilton, 2009; Stark, 2011).

School-Based Intervention Programs

Schools are an ideal setting for prevention and early intervention as they have unparalleled contact with youth (Christner, Forrest, Morley, & Weinstein, 2007; Masia-Warner, Nangle, & Hansen, 2006). Due to the significant amount of youth that suffer from depression, numerous depression prevention programs have been implemented within the school systems. Three types of prevention programs (universal, selective, and indicated programs) aimed at reducing rates of depression in youth have been described in the research (Calear & Christensen, 2009). Universal programs are meant to involve all students, regardless of the presence of symptomatology, in order to prevent the onset of depressive disorders or depressive symptoms by building resiliency among students. Selective programs target youth at risk for developing depression based on specified risk factors (2009). Indicated programs are designed to treat children who are already experiencing symptoms of depression, and indicated programs will be the focus of this chapter. A brief review of the indicated school-based prevention programs is presented in Table 1. For a more extensive overview of each program, please refer to reviews by researchers Calear and Christensen (2009) and Maag, Swearer, and Toland (2009).

The majority of the school-based interventions targeting children and adolescents with depressive symptoms are comprised of cognitive behavioral components (Calear & Christensen, 2009; Maag, Swearer, & Toland, 2009). Indicated programs implemented within schools have included ACTION (Stark & Kendall, 1997), Adolescents Coping with Emotions (ACE; Wignall, Gibson, Bateman, & Rapee, 1998), the Coping with Depression course (CWD; Lewinsohn, Rohde, Hops, & Clarke, 1991), the Coping with Stress course (CWS; Clarke & Lewinsohn, 1984), Primary and Secondary Control Enhancement Training (PASCET; Weisz et al., 1997), Penn Optimism Program (POP; Jaycox, Reivich, Gillham, & Seligman, 1994), Penn Prevention Program (PPP; Jaycox et al., 1994), Penn Resiliency Program (PRP; Freres, Gillham, Reivich, & Shatte, 2002), Teaching Kids to Cope (TKC; Puskar, Lamb, & Tusaie-Mumford, 1997), and The Feelings Club (Manassis, et al. 2010).

Generally, indicated programs have been an effective approach to the treatment of depressive disorders within schools. Inclusion criteria for the designated programs varied by level of depressive symptoms with some programs including students who exhibited elevated depressive symptoms (defined as the presence of 1–4 depressive symptoms that have lasted for 2 weeks or longer) and other programs required students to meet full criteria for a depressive disorder. Most school-based interventions have targeted children in the third grade or higher, but one study did include children with increased depressive symptoms in the first and second grades (Yu & Seligman, 2002). Three of the studies additionally included a parent component involving parent training or parent psychoeducation (Gillham et al., 2006; Manassis et al., 2010; Stark, Simpson, Yancy, & Molnar, 2007). To evaluate effectiveness of these treatment programs, researchers have conducted

Table 1 Review of indicated school-based prevention programs for youth with depression

Study	Prevention program	Length of intervention	Intervention administrator	Criteria for inclusion	N	Age
Butler et al. (1980)[a,b,c]		10 meetings 60-minute		Self-report depression battery score >59	56	M = 10.0, Grade 5–6
Clarke et al. (1995)[a]	CWS	15 meetings 45-minute		CES-D≥24, no current MDD or dysthymia based on K-SADS	144	Grade 9–10
Gillham et al. (2006)[a,b]	PRP	8 meetings 90-minute	Research assistants	Highest 44 scores from subject pool based on combined CDI and RCMAS	44	Grade 6–7
Hannan et al. (2000)[a]	Pilot for ACE	8 meetings 90-minute	Researcher	CDI >7	20	M = 10.9, Grade 5–6
Jaycox et al. (1994)[a,b]	PPP	12 meetings 90-minute	Graduate clinical psychology students	Combined CDI and CPQ *z*-scores >.50	143	M = 11.4, Grade 5–6
Kahn and Kehle (1990)[a,b]	CWD	12 meetings 60-minute	School psychologist, school counselor	CDI >15, RADS >72, and BID >20	69	Grade 6–8
Kowalenko et al. (2005)[a,b]	ACE	8 meetings 90-minute	School counselor and mental health worker	CDI >18	126	M = 14.6[d], Grade 9
Lamb et al. (1998)[a,b]		8 weeks	PhD psychiatric mental health nurse	Moderate to high range on RADS	40	M = 15.8, Grade 9–12
Liddle and Spence (1990)[b,c]		8 meetings 60-minute	Post graduate clinical psychology trainee	CDI ≥19, CDRS-R >40	31	M = 9.2, Grade 3–6
Manassis et al. (2010)[a,c]	The Feelings Club	12 meetings 60-minute	Psychologists, psychology graduate students	*t* >60 on MASC or *t* >60 on CDI	148	Grade 3–6
Puskar et al. (2003)[b]	TKC	10 meetings 45-minute	Master's level nurses	*t* >60 on RADS	89	M = 16.0, Grade 9–12
Reynolds and Coats (1986)[a,b]		10 meetings 50-minutes	School psychology doctoral student	BDI ≥12, RADS ≥72, and BID ≥20	30	M = 15.7, Grade 9–12
Roberts et al. (2003)[a,b]	PPP	12 meetings	Nurses, school psychologists	Highest 13 CDI scores from each class	189	M = 11.9, Grade 7
Ruffolo and Fischer (2009)[a]		9 meetings 45-minute	Social workers	Mild to moderate levels of depression on CDI and BDI-II	60	Grade 6–12
Sheffield et al. (2006)[a,b]	ACE	8 meetings 90-minute	School counselors and community and mental health professionals	Top 20% of sample for combined CDI and CES-D	521	M = 14.3, Grade 9

Shirk et al. (2008)a		12 meetings	Doctoral level psychologists	C-DISC-IV diagnosis of MDD or dysthymic disorder	50	M = 15.9, Grade 9–12
Stark et al. (1987)[a,b]		12 meetings 45–50 minute	Doctoral psychology candidate and psychologist	CDI >16	29	M=11.2, Grade 4–6
Stark et al. (1997)[b]	ACTION	20 group 2 individual meetings 60 minutes	School psychology doctoral students	K-SADS diagnosis of a depressive disorder	151	M = 10.7, Grade 4–6
Weisz et al. (1997)[a,b]	PASCET	8 meetings 50-minute	Doctoral students	CDI ≥11 and/or CDRS-R ≥34	48	M = 9.6, Grade 3–6
Yu and Seligman (2002)[a,e,b]	POP	10 meetings 120-minute	Teachers	Top 25% of z-scores from CDI and cohesion and conflict subscales of FES	220	M = 11.8, Grade 1–2, 4–6

[a]Indicates significant results
[b]Included waitlist or non-intervention control group
[c]Included active control group
[d]Mean age from pretreatment group
[e]Data from study 3 of article

comparisons of cognitive behavioral interventions to control conditions, as well as comparison to specific interventions such as relaxation training (Kahn & Kehle, 1990; Reynolds & Coats, 1986), social skills training (Butler, Miezitis, Friedman, & Cole, 1980), self-control training (Stark, Reynolds, & Kaslow, 1987), and self-modeling (Kahn & Kehle, 1990). An important factor to consider in the implementation of manualized treatments is who will be conducting the intervention. Intervention leaders within the schools have included doctoral-level clinical psychologists, doctoral-level graduate students, school psychologists, school counselors, social workers, nurses, and teachers. In addition to identifying the therapist, training of these individuals is very important and will be discussed later in the chapter. Below is a brief description of the treatment components (for a more in-depth explanation of the treatment components, please refer to Stark, Streusand, Krumholz, & Patel, 2010).

ACTION Treatment Program

ACTION is a developmental and gender-sensitive program that consists of a 20-session child treatment component with two individual meetings (e.g., Stark, Schnoebelen et al., 2007), a workbook that facilitates completion of therapeutic homework (Stark, Simpson, Schnoebelen, Glenn, & Hargrave, 2007), and an eight-session parent-training component (Stark, Simpson, Yancy, & Molnar, 2007; Stark, Yancy, Simpson, & Molnar, 2007). Although it has not been empirically tested, the treatment has been clinically adapted from a group format and for girls between the ages of 9 and 13, to be conducted with boys, older youth, and also has been successful in an individual format. The child intervention includes (a) psychoeducation, (b) goal setting, (c) coping skills training, (d) problem-solving training, (e) cognitive restructuring, and (f) activities that build a positive self-schema. Because the ACTION program is based on a coping skills model, additional treatment procedures include training in self-monitoring, self-evaluation, and self-reinforcement.

Psychoeducation

Psychoeducation provides participants with an understanding of their experience of a depressive disorder, the potential causes of depression, and the rationale for treatment. To help participants identify their emotional experiences, they are taught to examine the "3Bs" (brain, body, and behavior). This allows them to be more aware of the emotions, inaccurate thoughts, and behaviors that stem from and maintain depression. Participants are first taught to become more aware of their experience of pleasant emotions; then they are taught to become aware of and sensitive to changes in mood so that they can use the changes as cues to engage in therapeutic strategies. Participants are taught how to use a mood meter to rate intensity and subjective nature of their mood disturbance.

Goal Setting

Goal setting contributes to the development of the therapeutic alliance, and it individualizes the intervention. Goals for treatment are collaboratively established with each child in an individual meeting. As each of the child's goals is achieved during the group treatment, the therapist emphasizes the child's role in achieving the goal, thus building a sense of personal efficacy. Often, the therapist will collaborate with parents and teachers to help facilitate goal achievement as well as promote social reinforcement through the encouragement of other group members.

Coping Skills Training

Coping skills training is a building block in the treatment of depressed youth, helping children improve and regulate their mood, as well as manage the emotional impact of uncontrollable stressful events. To reduce the symptoms of dysphoria, irritability, or anhedonia (loss of the pleasure response), one of the primary objectives of coping skills training is to provide the depressed child with skills to improve overall

mood. This process is commonly referred to as behavioral activation—getting the child reengaged in behaviors that lead to pleasant mood, promote mastery experiences, increase positive social interactions, and further the acquisition of other reinforcing events. Another objective of coping skills training with depressed youth is to lift mood when the child experiences a decline in mood, prevent experiences of stress, or moderate the impact of stress.

Participants are taught five broad categories of coping strategies: (1) Do something fun and distracting, (2) do something that is soothing and relaxing, (3) do something that expends a lot of energy, (4) talk to someone about it, or (5) change your thinking. Children are taught the mood regulating value of coping skills within the meetings and then are encouraged to use the skills outside of meetings. They are provided with didactic education and guided discovery about the five broad categories of coping skills. During the first nine meetings, the girls complete the activities that demonstrate the value of using each of the five skills. After experiencing these mood-elevating benefits, the girls generate lists of examples of activities that they could use outside of the meetings to enhance mood. At the end of each meeting, they are assigned therapeutic homework to use coping skills. Through clinical observation, it has been noted that coping skills also have an indirect impact on the probability that children will use other treatment strategies. For instance, a child who is overwhelmed by stress or is extremely dysphoric may not independently try to use problem solving or cognitive restructuring. Coping skills provide an effective way of raising their mood and reaching the energy and affective state necessary to attempt independent use.

Problem Solving

As participants acquire a better understanding of their emotions, accurately identify them, recognize their impact on behavior and thinking, and understand that they can take action to moderate the intensity and impact of them, they are taught that some of the undesirable situations that lead to unpleasant affects can be changed. Problem solving is used as a strategy for changing situations that are within the child's control but that produce stress, unwanted outcomes, or undesirable affects. Participants are taught to break problem solving down into five component steps through education, modeling, coaching, rehearsal, feedback, and participation in a number of within-session activities. To simplify the process and to help the girls remember the steps, the therapist refers to them as the "five Ps" which include (1) identifying the Problem, (2) determining the Purpose or goal anticipated, (3) creating possible Plans to address the problem, (4) Predicting the outcomes of each plan and Picking the best one, and (5) rewarding self participation with a Pat on the back.

Cognitive Restructuring

Cognitive restructuring is implemented in a developmentally sensitive fashion. Training in cognitive restructuring is most effective when it is preceded by systematically teaching children about the nature of cognition and identifying negative thoughts. To help participants understand their cognitions, we use activities to establish that (a) thoughts affect feelings and behavior, (b) there are multiple stimuli that can be attended to at any time, (c) thoughts are constructed, (d) the construction process is not veridical so thoughts may not be true, (e) thoughts can be changed, and (f) changing thoughts changes affect and behavior. The notion that thoughts may *not* be true is foreign to children. Prior to completing these activities, they believe "Because I think it, it must be true." This knowledge serves as the rationale for cognitive restructuring and contributes to the credibility of the procedure. To identify negative thoughts, participants are first taught to listen for times when their therapist and other group members verbalize negative thoughts. As they become proficient listeners, they complete homework assignments and within-group activities that help them identify their own negative thoughts, and they are reinforced for doing so.

Cognitive restructuring is not simply replacing negative thoughts with positive thoughts. It involves evaluating the validity of the negative thoughts, and this evaluation is guided by a number of questions: (a) What is the evidence? (b) What is another way to think about it? (c) What would I tell my best friend? and (d) What if the thought is true? We use the first two questions with children 14 or younger and all four questions with older youth. In addition, we use a procedure with younger participants that they have named "Talking Back to the Muck Monster." This procedure involves the therapist verbalizing the target child's typical negative thoughts, playfully, as the Muck Monster. The target child then talks back to the Muck Monster by arguing against the negative thoughts, with other group members assisting as needed (for a description, see Stark, Krumholz, Ridley, & Hamilton, 2009). This procedure works extremely well with younger children, and they report that it is a memorable experience that they apply outside of sessions. The ultimate objective of cognitive restructuring is changing the core beliefs that underlie negative thoughts and are associated with sadness: I'm unlovable, I'm helpless, and I'm worthless (Beck, Rush, Shaw, & Emery, 1979). The depressed child is likely to hold one or more of these core beliefs.

Parent Training

The parent-training component is a hybrid of parent training and family therapy. The objective of the training is to teach parents the same skills that their daughters are learning, to change the family environment so that it is more positive, and to change parent–child interactions that contribute to the development and maintenance of the depressive style of thinking. The parent-training component includes positive behavior management, family problem solving, communication skills, conflict resolution, and changing behaviors that support depressive core beliefs. Positive behavior management strategies are taught to parents first to try to change the affective tone in the home so that it supports the effort to improve the child's mood through coping skills training and behavioral activation. Parents are taught family problem solving so that they can model the procedure for their children, help them acquire the skill, and support them as they adopt a general problem-solving attitude. Parents are then taught effective communication skills (e.g., empathic listening), followed by conflict resolution skills because these can contribute to a more positive family environment. To support the desired cognitive change that the children are working toward, it is necessary to decrease conflict in the family and enhance positive interpersonal interactions between family members. Finally, with the children and families functioning more adaptively, the parents can collaboratively assess behaviors that they enact that support their children's negative core beliefs. Subsequently, they work at changing these behaviors to behaviors that communicate positive messages to their children, thus supporting the cognitive restructuring that their children are simultaneously learning and applying.

Empirical Evidence

Studies examining the efficacy of the ACTION program in comparison with other school-based depression programs or when implemented by school faculty have not been conducted. However, analyses of the original ACTION program study have shown promising results. The ACTION program compared three groups: participants who engaged in therapy only (CBT), participants who engaged in individual therapy with concurrent parent training for caregivers (CBT + PT), and participants who had minimal contact with weekly monitoring (MCC).

The sample consisted of 133 girls, aged 9–14, from two suburban central Texas school districts. The ethnic composition of child participants was 40.6 % White Hispanic, 38.3 % White non-Hispanic, 11.3 % African American, 1.5 % Asian, and 8.3 % multiracial. Inclusion criteria for participants included female in grades 4–7 who received parental consent for participation. Each participant met criteria for a depressive

disorder which was determined through a multigate screening process of completing self-report measures, a structured interview for depression with child and a diagnostic interview with parent and child. Exclusion criteria included additional psychological disorders that presented as a primary diagnosis, any psychotic symptoms, active suicidality and/or homicidal ideation, current engagement in treatment for depression, an IQ below 85 or a learning disability that would hinder participation, or a severe medical disability that would prevent consistent participation. Participants who were actively suicidal or homicidal or presented with severe psychotic features were referred for appropriate treatment.

The evaluation of the ACTION treatment program with girls found CBT was significantly more effective than a minimal contact control condition; more than 80 % of the girls who participated in CBT with or without parent training were no longer depressed following treatment (Stark, 2010, 2011; Stark, Stapleton, Arora, Krumholz, & Fisher, 2012). In contrast, 46 % of the girls in the minimal contact condition were no longer depressed following the control period. At posttreatment, there was no difference in scores or rates of depression for girls who received CBT or CBT plus parent training (Krumholz, 2011; Stark, 2010, 2011).

On average, girls who attended all CBT sessions experienced a steady decline in depressive symptoms over time, whereas girls who attended less than 20 sessions on average had increasingly higher reemerging levels of depressive symptoms as time progressed (Stark, 2011). With parent training, significant treatment gains across time were evident for participants whose parents attended six or more of the eight parent-training sessions (Krumholz, 2011). Higher rates of child and parental attendance were generally predictive of a sustained decline in girls' depressive symptoms over time (Stark, 2010, 2011).

In the evaluation of treatment components, behavioral interventions (i.e., behavior activation, positive reinforcement, homework review, and skills training) were found to significantly reduce depression by mid-treatment, with treatment gains sustained during administration of cognitive interventions (Patel, 2010). A positive impact within the family environment of less family conflict, positive communication, and increased sense of family cohesion was also found with parent participation in treatment (Krumholz, 2011).

Transportability

The school setting allows the emotional problems of previously unidentified and untreated youth to be addressed (Ginsburg & Drake, 2002). In fact, 98 % of youth who are referred for treatment engage in school-based mental health services compared to only 17 % of youth who engage in community clinic-based mental health services (Catron & Weiss, 1994). Mental health care delivered in school settings avoids common barriers to treatment provided in outpatient facilities, such as inadequate transportation, extensive waiting lists, high costs of treatment for clients, and scheduling conflicts (Barrett & Pahl, 2006; Masia-Warner et al., 2006; McLoone, Hudson, & Rapee, 2006). Despite these benefits and the effectiveness of intervention that have been developed for depressed youth, few schools currently utilize evidence-based treatment programs, such as ACTION, due to implementation concerns and barriers (Weisz, 2000). In this section, we discuss common barriers, as well as ways schools may address these barriers, particularly in regard to the implementation of the ACTION program, and other important considerations in implementing an effective CBT school-based program.

School Commitment

The first step to implementing any school-based program for depressed youth is to get buy-in from all administrators and school leaders as well as key staff personnel. Studies have indicated that the success of a school-based intervention is dependent upon the support and cooperation of the school's administrators and principals (Litvak, 1991; Stark, Brookman, & Frazier, 1990). Commitment of the school leaders is

needed in order to support staff in the required changes as well as budget the substantial and sustainable finances needed to implement the intervention (Forman, Olin, Hoagwood, Crowe, & Saka, 2009; Ruffolo & Fischer, 2009). Given the financial constraints of school systems, the benefits of the program as well as the costs to children and community members must be made clear and disseminated to other staff in order to create motivation for implementing a new program (Ruffolo & Fischer, 2009). In large, without administrative support, as well as support from the community, the funds will not be allocated to implementation of these programs. Additionally, school leaders must have an understanding that such interventions are not a short-term, quick-fix solution but are a long-term commitment in order to benefit from the gains of the implemented program (Bond, Glover, Butler, & Bowes, 2004). Ways to implement school-based mental health programs, specifically ACTION, at minimal cost will be discussed within the sections below.

Commitment of school leaders and staff are also required in order to ensure fidelity of the school-based program as well as allow flexibility in its administration. The scheduling and administration of treatment sessions must be flexible in order to accommodate students and, if applicable, parent schedules (Ginsburg, Becker, Kingery, & Nichols, 2008; McLoone et al., 2006). Flexibility can only be maintained with the understanding and support of school administrators. Additionally, by supporting a flexible program, school administrators may minimize resistance from staff and increase the likelihood of the program's success (Ruffolo & Fischer, 2009). In ACTION, flexibility can be provided by adjusting the session time to correspond with the length of a class period, arrange group meetings at various school periods based upon the students' and involved staffs' schedules, and flexibility in supervision and training schedules, which will be discussed below.

Treatment Parameters

School-based interventions vary in implementation. The frequency of treatment sessions can range from once a week to multiple times per week (Clarke et al., 1995; Kahn & Kehle, 1990; Stark, Schnoebelen, et al., 2007). A review of the literature indicated that the duration of treatment sessions ranged from 45 min (Clarke et al., 1995) to 120 min (Yu & Seligman, 2002) with most of the group meetings held after school or on the weekends for these studies. When meetings are conducted during school hours, the duration of each meeting will often be prescribed by school administration. It is important to also consider the child's developmental level when determining the duration time of the meetings. Longer meetings are recommended for older youth, while shorter meeting times would best support younger ages. Based on the ACTION study, we suggest 1-h meetings with groups of 9- and 10-year-olds and 75-min meetings with girls 11 and older. Experience also suggests that girls and younger adolescents benefit from meeting twice per week rather than once per week. There are numerous advantages to twice-weekly meetings (see Stark, 2005).

Researchers have not reached a consensus regarding the minimum number of meetings needed to produce an effective outcome. It is possible that the number of meetings required may be idiosyncratic to each student. Based on the review of school-based intervention, the minimum number of meetings was 8 meetings (Gillham et al., 2006; Hannan, Rapee, & Hudson, 2000; Lamb, Puskar, Sereika, & Corcoran, 1998; Liddle & Spence, 1990; Sheffield et al., 2006; Weisz et al., 1997) and the maximum was 20 meetings (Stark & Kendall, 1997). The ACTION program found that participants who completed at least 18 meetings had a significantly better outcome than participants who completed less than 18 sessions (Krumholz, 2011).

Environmental Constraints

Implementation in a school setting has numerous obstacles that can impact the intervention. These obstacles include schedule conflicts, student absences, and teacher reluctance to allow students to miss class. The key ingredient for

addressing these obstacles is the use of flexibility and creativity. When there are schedule conflicts or students are absent, the therapist needs to be prepared to reschedule the meeting and/or individualize and reorganize a particular session from the manual. The therapist must also be willing to collaborate with teachers, who are concerned with students missing their class, and work around teachers' schedules, which will occasionally involve compromise.

Additionally, time commitments from teachers and school psychologists for training, supervision, and implementation are a major concern for schools wanting to implement a school-based intervention (Ruffolo & Fischer, 2009), such as ACTION. The manualized school-based program should allow for flexibility in the number of sessions per week, as well as the time per session as the staff implementing the program can follow the manual at the group's pace. Sessions may be reviewed, as well as repeated if necessary. The group format also allows more students to participate in the intervention within limited time constraints. However, it is recommended to not exceed six girls per group.

Training School Staff

Although schools may represent an ideal location for increasing access to treatment for depressed youth, many school social workers and school mental health providers are not trained or supervised to administer group CBT interventions (Ruffolo & Fischer, 2009). Training school staff to implement programs well and with fidelity is important, as characteristics of the training process influence treatment outcome and contribute to weaker effects when a program is transported into a new system (Schoenwald & Hoagwood, 2001). For example, even though ACTION is a manual-based intervention, without adequate training, the therapists apply rigid adherence to the treatment manual, often making the treatment less engaging for participants and reducing the effectiveness of the program (Stark, Arora, & Funk, 2011). The most common method for school mental health providers to obtain continuing education is to complete a 1- or 2-day workshop; however, this method does not appear to be effective at producing treatment fidelity or the same quality of treatment outcome. It's been found that training through workshops alone is not effective in establishing clinical competence (Sholomskas et al., 2005). Workshops do not teach the subtle aspects of implementing the treatment nor the clinical judgment and decision-making that is necessary to successfully implement the intervention (Collins, Leffingwell, & Belar, 2007). However, when workshops are supplemented with ongoing supervision, including reviewing session tapes (Weisz, Donenberg, Han, & Weiss, 1995), consultation, and the provision of feedback, fidelity of implementation as well as outcomes are improved (Stark et al., 2011). Including supervision into training also helps the trainee learn how to be flexible in providing the treatment. Flexibility refers to the therapist's ability to individualize the treatment manual for each child by changing the content of the meeting to that of a different meeting or using a different, but related, treatment strategy than the one in the manual when needed. Furthermore, additional supervision and training is recommended, as some of the treatment strategies are not simplistic or intuitive enough for the majority of therapists who have not previously received training in CBT models.

As an example, in the ACTION study, doctoral-level psychology students with extensive, specialized training implemented the treatment program. The doctoral students had completed 3 years of graduate-level coursework, including a CBT didactic course and semester-long practicum in which they worked with 3–4 child clients experiencing a variety of emotional difficulties. The doctoral students additionally received training in the ACTION manual, including reviewing the materials, observing senior therapists implementing the treatment, and co-leading with a senior therapist. It was only after achieving competence assessed through ratings of audiotape that the doctoral student could complete the treatment under the supervision of the PI. In this training, ACTION therapists were taught to develop a cognitive conceptualization (e.g., Beck, 1995) of

depression for each student in their group to use as a guide for the application of the intervention for each group member. Supervision of the therapists included weekly group and individual meetings to discuss the therapists' case conceptualizations, experiences, and concerns. Therefore, training is a key component to ensuring fidelity to the treatment manual as well as increasing the effectiveness of the implemented program. It is suggested that despite the training level of the individual implementing a school-based group CBT program, they not only attend a professional developmental workshop on the program to be implemented but also receive supervision from an expert in the field. This supervision is vital to ensure the program is maximizing its effectiveness. Although this type of professional training is typically more expensive than the traditional workshop model, if the school district is going to make the commitment to implementing a school-based CBT program for depressed youth, the school should commit to the best possible and most effective therapy. Otherwise, the school has spent money and time to implement an ineffective program into their school system.

Conclusion/Discussion

Depression is a significant mental health concern for youth, particularly during adolescence. Depression can have a turbulent course which can impede development in academic functioning, self-esteem, and formation of peer relationships. Due to school systems' unparalleled access to youth, schools have been identified as the ideal setting to implement intervention programs for depression. Indicative programs for depression have been found to be effective within school settings. Variety in implementation exists across the different indicative programs, including the format, number, and length of sessions as well as who leads the group sessions. However, all programs should use assessment to inform and guide indicative programs. The ACTION program serves as a good model for an effective school-based intervention for depression, especially given the flexibility in which it can be implemented in the school.

Although school-based interventions for depression can be very effective, implementation difficulties and variations in the effectiveness continue to exist in such programs. Implementing and assessing change in complex environments is challenging. Therefore, further work is needed to determine the exact mechanisms of change and to explore how interactions between context and intervention affect the success of such complex interventions. Additionally, the evaluation and dissemination of evidence-based treatments with original school staff implementing interventions is needed to further understand the transportability and effectiveness of school-based interventions for depression.

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Organization Interventions for Children and Adolescents with Attention-Deficit/ Hyperactivity Disorder (ADHD)

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The Role of Organization in Attention-Deficit/Hyperactivity Disorder

Youth with attention-deficit/hyperactivity disorder (ADHD) exhibit deficits in organization that are pervasive across multiple domains of functioning. Specifically, youth with ADHD commonly have difficulty organizing time, belongings, activities, and thoughts. In fact, many of the defining features of ADHD, as outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM), are related to deficits in the ability to organize (e.g., "Often has difficulty organizing tasks and activities," "Often loses things necessary for tasks or activities," "Is often forgetful in daily activities"; American Psychiatric Association, 2000). Accordingly, although ADHD is most often conceptualized as a disorder of inattention or hyperactivity/impulsivity, it could also be conceptualized as a disorder of organization.

Deficits in organization contribute to the functional impairments observed in children with ADHD. In the social domain, difficulties organizing information and thoughts contribute to the problems children with ADHD exhibit in understanding social cause-and-effect relationships and generating solutions to interpersonal problems (Lorch et al., 2000; Sibley, Evans, & Serpell, 2010). At home, problems with organization and time management lead to parent-child conflict surrounding homework and chore completion (Barkley, 2006). At school, difficulties organizing time, tasks, and materials contribute to poor academic achievement. Notably, parent and teacher ratings of a child's ability to manage materials are predictive of grade point average (GPA) even after controlling for other important influences (Langberg, Molina, et al., 2011; Langberg, Vaughn, et al., 2011; Schultz, Evans, & Serpell, 2009).

Models of executive functioning that theorize about the underlying deficits associated with ADHD also include many aspects related to organization. Executive functioning has been defined by Pennington and Ozonoff (1996) as consisting of five components: (1) fluency (ability to develop solutions for a specific problem), (2) working memory (ability to store information in the mind while working to manipulate it), (3) inhibition (ability to prevent one's dominant behavioral response), (4) set shifting (ability to change to another activity or strategy when necessary), and (5) planning (ability to determine the necessary steps to solve a problem). Many of these are directly related to the ability to organize information. For example, fluency is related to thought organization and being able to consider all of the information that might be relevant to a particular

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problem. Similarly, set shifting is related to organization of tasks in that it requires the individual to understand the steps involved in completing a task and to be able to transition effectively from one task to another. Lastly, planning is clearly related to a person's ability to organize the time, tasks, and materials involved in solving a problem. Thus, ADHD may be conceptualized as a cluster of symptoms (inattention, hyperactivity, and impulsivity) related to deficits in executive function and organization of time, materials, tasks, and thought processes.

Organization Demands in Childhood and Adolescence

Demands on a youth's organizational skills shift throughout development. As a result, problems with organization, such as those observed in children with ADHD, tend to exacerbate as youth grow older. Problems increase in the school environment, following the transition from elementary to middle school which, for several reasons, is frequently associated with an increase in demand for independent organization (Evans, Serpell, & White, 2005).

First, beginning in middle school, teachers place emphasis on larger long-term projects, increasing the demand on the student's ability to plan the task and organize his or her time. Second, students are more likely to have different teachers for each academic subject, requiring them to keep track of the assignments and expectations for multiple teachers. Third, teachers expect students to organize their own materials and space (e.g., lockers, book bags) by the time they reach middle school and typically offer minimal guidance or support with organization. Fourth, there is less frequent communication between teachers and parents as youth reach higher grade levels, thus reducing the quality of support that parents are able to provide in helping to ensure that the student tracks, and completes, academic assignments. Lastly, students tend to acquire more school-related materials, both in terms of more academic materials (books, notebooks, pens, and pencils) and other belongings (e.g., house keys, wallets, musical instruments, sports equipment), all of which they must organize. These factors make it increasingly challenging for students with organizational deficits to be successful in school.

Indeed, as they continue into high school, students with ADHD demonstrate a number of school-related negative outcomes. Compared to their non-ADHD peers, students with ADHD have lower grades, take a less rigorous academic curriculum, are more likely to fail core courses, have significantly more frequent absences and tardies, turn in fewer completed homework assignments on time, and are less likely to be rated by teachers as working up to their potential (Kent et al., 2011). In addition, they are more likely to drop out of high school and to be taking remedial or basic-level courses (Kent et al). These patterns suggest that the organizational deficits of students with ADHD are long-lasting and affect numerous aspects of their school functioning, regardless of academic aptitude. Because organizational skills are amenable to change, interventions targeting organization are well situated to address many of the core deficits associated with ADHD.

Interventions for Improving Organization in Children and Adolescents

School-related organization interventions for youth with ADHD are reviewed on the following pages. Studies are included in this review if they have been, or could be, implemented at school and include organization intervention. For the purposes of this review, organization interventions are defined as any program or treatment intended to address difficulties in managing materials, time, or tasks, with the goal of improving academic performance. These interventions may stand alone or may be included as part of a larger treatment package that also addresses other impairments. In this review, homework interventions are included, whether they were provided at a school or elsewhere, because of their clear connection to organization and school-related outcomes. Given that the manifestation of problems with

organization (and thus the targets of organization interventions) changes over time, the review is separated into studies that target elementary school-age children and studies that target secondary school-age children.

Interventions for Elementary School Children

PATHKO and OST

Abikoff and colleagues developed two organization interventions for upper-elementary school students (grades 3–5), one of which was skill based and the other focused on organizational performance (Abikoff et al., 2013). In the skill-based intervention, called Organizational Skills Training (OST), clinic-based therapists with experience in behavior therapy taught children to use tools and routines to record assignments, track due dates, organize materials in binders, use a checklist to monitor materials needed, track time required for completing tasks, and break tasks into steps. Parents and teachers were briefly trained to prompt, praise, and reward the appropriate use of these skills. In contrast, the Parents and Teachers Helping Kids get Organized (PATHKO) intervention focused on organizational performance, without explicit skills training. In this program, teachers and parents were trained to set individualized organizational goals for the students and to prompt, monitor, and reward the achievement of these goals, using a Daily Report Card, token economy, and rules and structure for completing homework. Each program consisted of twenty, 1-h clinic-based sessions.

In a large randomized controlled trial, Abikoff and colleagues compared the two interventions and a waitlist control in a sample of 151 students with ADHD and organizational deficits (Abikoff et al., in press). Organizational deficits were defined as having a score more than one standard deviation above the age- and sex-based mean on either the parent- or teacher-rated Children's Organizational Skills Scale (COSS; Abikoff & Gallagher, 2009) and parent or teacher report of functional interference. Both OST and PATHKO were superior to waitlist control on parent-rated organization (Cohen's $d = -2.77$ and -2.13, respectively; note that although some effect sizes are negative, all effects were in the expected direction, with an advantage for the treatment group), teacher-rated organization (Cohen's $d = -1.18$ and -1.21, respectively), teacher-rated academic functioning (Cohen's d range from 0.76 to 0.82), and parent-rated homework behavior (Cohen's $d = -1.37$ and -1.51, respectively). Interestingly, both interventions also produced improvement on several dimensions of parent-rated family functioning, suggesting that reducing organization-related conflicts has a significant impact on the family environment. Importantly, children in the OST condition outperformed children in the PATHKO condition on parent ratings of organization (Cohen's $d = -0.63$). The authors concluded that both skill-based and performance-based models of intervention might be useful in addressing organizational deficits in children.

Parents and teachers reported high levels of satisfaction with the clinic-based intervention model, and the therapists maintained high levels of intervention integrity. A limitation of this program is that the study was conducted in the context of clinic-based sessions. Thus, the sample is restricted to children whose parents are motivated to help them improve and have the resources to obtain care from a clinic. It is likely that a school-based sample would have much greater variability in the level of parent involvement and motivation. Nevertheless, the intervention seems likely to transfer well to a school setting, although some modifications may be necessary. For example, the length of the sessions may need to be shortened to accommodate the school schedule, and modifications to allow a group format may increase feasibility.

The Homework Success Program (HSP)

The Homework Success Program (HSP) is a manualized seven-session group-based intervention involving parents, teachers, and children in collaboratively establishing parameters for homework completion, in order to improve the homework performance of elementary school-age children with ADHD (Habboushe et al., 2001). The HSP has been evaluated using a series of 5

single-case studies of elementary school students. In the HSP, parents received education related to ADHD and homework (i.e., establishing of ground rules, using effective commands and positive reinforcement, managing time, setting goals, and negative consequences). Children helped to set goals for homework completion and accuracy, and teachers communicated with parents about homework completion.

The results suggested beneficial effects of the program for improving homework problems, parent-child conflict, parenting stress, academic productivity, and homework completion and accuracy relative to baseline; however, large-scale studies have not been completed. The majority of families found the intervention acceptable. This intervention was implemented in a clinic and has not been attempted as a school-based program. HSP could be implemented in school if there is a provider who is able to work with parents, children, and teachers. Modifications to the procedures may be needed if HSP were to be offered in a school. For example, parent and child groups are designed to run concurrently, with parents and children meeting together for a portion of the time, which may not be possible for many working parents. Meetings in the evenings could limit the willingness of school mental health professionals to run the groups. In addition, providing the groups concurrently requires the involvement of more than one professional. Nevertheless, results are encouraging regarding the coordination of parents, teachers, and children to improve homework-related behavior.

The Multimodal Treatment Study of Children with ADHD (MTA)

The Multimodal Treatment Study of Children with ADHD (MTA) was a multisite, randomized clinical trial of the well-established treatments for children with ADHD (MTA Cooperative Group, 1999). In this study, 579 children, ages 7–9, were randomly assigned to receive medication management, intensive behavioral interventions, their combination, or community care control. The MTA did not include an intervention specifically targeting organization, but several of the components of the behavioral intervention targeted school functioning, including homework performance, that are related to organization. The Daily Report Card intervention provided a parent-teacher communication tool as well as immediate feedback for the student regarding behavior. Further, parents received training in how to use a token economy system for homework completion and to structure the homework setting to reduce distractions. Interventions were provided by highly trained clinicians using standardized procedures under close supervision.

Langberg and colleagues (2010) examined the effects of the four treatments on improving homework problems as measured by parent report on the Homework Problems Checklist (Anesko, Schoiock, Ramirez, & Levine, 1987; Langberg et al., 2010). At the end of the 14-month treatment phase, participants in each of the MTA treatment groups (combined, behavioral, and medication) made significant improvements in homework problems relative to the community comparison group. However, only those participants who received the behavioral interventions (combined and behavioral) had sustained improvements in homework problems relative to community care at the 10-month follow-up assessment. The magnitude of the sustained effect was small to moderate for the combined group ($d = .37$) and for the behavioral group ($d = .36$).

This study provides evidence that behavioral interventions can be effective in improving homework-related difficulties in children with ADHD. The strength of this study lies in the robust methodology and large sample size. However, a limitation of this study is that the intensity of the behavioral interventions provided in the context of the MTA is unlikely to be replicated outside of a randomized trial. Even so, many of the components of the intervention package could certainly be used to address organizational deficits that manifest in the school setting (e.g., the Daily Report Card, homework intervention for parents). Future research may investigate the unique effects of each intervention component, as well as their combination, in targeting the organizational problems of children with ADHD.

The Family-School Success (FSS) Program

Power and colleagues designed a multimodal treatment for families of children with ADHD focused on improving family functioning and school performance (Power, Mautone, Soffer, Clarke, Marshall, Sharman et al., 2012). In the Family-School Success (FSS) program, clinicians and graduate students in psychology led six clinic-based parent group meetings held concurrently with child group sessions, four clinic-based individual family therapy sessions, and two school-based parent-teacher consultations. Intervention included behavioral management skills for both parents and teachers. It aimed to increase the family's involvement in the child's education, as well as teach the parent and child homework management strategies. Because, in practice, many children are taking medication at the time they begin a psychosocial intervention, researchers gave families the option to participate in a medication trial prior to beginning the FSS program. Slightly more than half of the families chose to participate in the medication trial and began FSS while taking medication concurrently. Thus, for more than half the sample, treatment group effects represent incremental effects of the psychosocial intervention, in addition to the optimal medication effects achieved in the medication trial. The organizational skill components of the treatment program were instructing parents and students in the use of a homework book, the implementation of and adherence to a homework routine, and the use of goal setting and time management strategies.

Power and colleagues (2012) conducted an evaluation of FSS that included 199 clinic-referred children with ADHD in grades 2 through 6 who were randomly assigned to the FSS program or to a control group that was carefully controlled for nonspecific effects of time and therapeutic support. Parents in the treatment group reported fewer homework problems related to inattention and task avoidance (Cohen's $d = 0.52$) than parents in the comparison group. At 3-month follow-up, FSS outperformed the comparison group in terms of parent-rated homework productivity and adherence ($d = 0.56$) but only for students who were also taking medication.

Although significant results emerged on parent report, there were no significant group differences according to teacher report. The authors note that this could be partly due to the intervention not addressing organization and homework-related behaviors in the classroom setting. Importantly, the intervention was highly acceptable to parents, teachers, and children, resulted in increased parent involvement in school at 3-month follow-up, improved parent-teacher relationships, and decreased parental negative discipline strategies. The limitations to these findings are similar to the previously described clinic-based interventions. Future research may investigate the feasibility of translating all components of the intervention to the school setting and boosting the emphasis on school and classroom-based organizational skills, as this could lead to improvements in teacher ratings of organization and task completion.

The Child Life and Attention Skills (CLAS) and Collaborative Life Skills (CLS) Programs

Pfiffner and colleagues created the Child Life and Attention Skills (CLAS) Program to meet the specific needs of children with ADHD inattentive type (Pfiffner et al., 2007; Pfiffner et al., 2011). It differs from traditional multicomponent treatment programs for children with ADHD in that it places less emphasis on disciplinary strategies and more emphasis on developing routines, schedules, organization, and time management skills (Pfiffner et al., 2007). The 12-week program included a Daily Report Card intervention to facilitate communication between parents and teachers about academic work. In addition, parents were provided training regarding the establishment of routines and activities for their children. Concurrently, children were taught academic, study, planning, time management, and organizational skills. Reinforcement was provided weekly to children who brought their organized materials to group. Intervention was provided by a team of psychologists (and psychology trainees), one of whom conducted parent and teacher consultations and the other two led the children's group.

Sixty-nine children in grades 2–5 were randomized to treatment or control group (waitlist in the first cohort, treatment as usual in the second through fifth cohorts). Parent ratings of inattention symptoms showed reductions of more than 50 %, compared to less than 16 % in the control group (large effect size, $\eta^2 = 0.18$). In the treatment group, 55 % of children had inattention T-scores within the normal range at posttreatment, compared to only 27 % of children in the control group. There was also a large effect for parent ratings of organization ($\eta^2 = 0.17$), as well as a significant group difference in parent and teacher ratings of global improvement (on a 7-point scale from "much worse" to "much improved"). Parents and teachers rated all children in the treatment group as at least slightly improved; one third of children in the control group were rated as unchanged or worse. The authors note that the effects on symptoms of inattention were similar to those found using medication. All parties reported a high degree of satisfaction.

The CLAS Program was originally designed for use in a clinic setting (Pfiffner et al., 2007) but was adapted for use as a school-based intervention (Pfiffner et al., 2011). Thirty-seven students in five elementary schools received the modified intervention, called the Collaborative Life Skills (CLS) Program. Teacher, parent, and child skill components were similar to those used in the clinic-based format and were implemented by school-based mental health professionals. The children made improvements in parent-rated ADHD symptoms, social skills, problem behaviors, organizational skills, and homework problems, with effect sizes (Cohen's *d*) ranging from 0.49 to 0.96. According to teacher report, students made significant improvements in ADHD symptoms, homework problems, and academic enablers (e.g., motivation, study skills), with marginally significant effects for problem behaviors and social skills.

The authors discuss the advantages of implementing the intervention in school, as well as the challenges in training school professionals to implement the intervention. Following 8 h of training (four 2-h sessions), school professionals received individual supervision, attended group meetings, and completed fidelity checklists. They were able to implement the intervention with fidelity but varied in the amount of support they required. Future research could focus on developing a program that retains the strengths of the CLS but with modifications either to the intervention or to the training and support procedures to enhance feasibility.

Interventions for Secondary School Children

Self-management Interventions

Interventions that teach children to monitor and improve their own behavior are referred to as self-management interventions and are often recommended for adolescents. Gureasko-Moore, DuPaul, and White (2006, 2007) investigated the effects of a self-management intervention for adolescents with ADHD. The training for the student was conducted during brief (20-min) individual meetings during the school day. A target class was selected for each student, based on the presence of organizational difficulties in that class. The students were active participants in the treatment program, setting goals, recording and evaluating their own daily performance, and problem-solving obstacles to meeting their goals. In addition, teachers completed checklists related to the student's classroom preparation. Additionally, in the second study, parents completed ratings of the students' homework preparedness (e.g., having correct materials and recording assignment accurately). In total, 9 boys, ages 11–12, received the intervention in a multiple baseline design across participants. By the end of the intervention, target students engaged in classroom preparation behaviors at rates comparable to comparison students observed by the same teachers (averages in both studies above 90 %, compared to less than 50 % for the treatment group at baseline). Classroom preparation behaviors continued to be high during the monitoring, fading, and maintenance phases, suggesting maintenance of treatment gains (Gueasko-Moore, DuPaul, & White, 2007).

Parents, teachers, and children reported that the intervention was effective and acceptable. This intervention is empirically limited, given the small sample size, but does provide preliminary evidence that self-monitoring can improve the classroom performance of middle school students with ADHD. In addition, this intervention was implemented by a research clinician and has not been tested for effectiveness when implemented by a school-based mental health provider. Further research might focus on replicating these results with larger samples, as well as using school-based mental health providers.

Self-management of Homework Behavior

Axelrod and colleagues conducted a study of a self-management intervention for homework completion among adolescents with ADHD (Axelrod, Zhe, Haugen, & Klein, 2009). The study included five high school students in a residential treatment program, who met the criteria for ADHD and comorbid externalizing disorders. In this residential program, students lived with therapeutically trained adult caretakers. Intervention included 24 one-hour homework monitoring sessions with the student, as well as a daily home-school communication note, through which information related to behavior, academic progress, homework assignments, and incomplete work were communicated from the teacher to the adult caretaker. Students were also provided with a tape recorder that would beep intermittently during homework completion to prompt students to log their own homework behavior. The intervention produced substantial increases in on-task homework behavior, as well as decreases in incomplete homework assignments. Teachers and students reported that they found the intervention to be beneficial. This intervention is limited in terms of empirical support and methodological rigor. However, it is unique in using a periodic self-monitoring system in which students intermittently pause to assess their own behavior. Future directions might include investigating such a procedure using a larger sample and a control group in a public school.

The Challenging Horizons Program (CHP)

Evans and colleagues conducted several studies of an organization intervention as part of a larger multimodal treatment program, the Challenging Horizons Program (CHP; Evans, Langberg, Raggi, Allen, & Buvinger, 2005; Evans, Schultz, DeMars, & Davis, 2011). The organization intervention was part of a comprehensive yearlong treatment program that also included a group intervention targeting social functioning, psychoeducational parent groups, and individual parenting support sessions. The organization intervention was conducted in a twice-weekly yearlong after-school program and focused on two main components: organization of materials (binder, book bag, and locker) and tracking assignments. The program was designed for middle school students with ADHD, and a modified version was evaluated with high school students (Sadler, Evans, Schultz, & Zoromski, 2011).

The binder organization component has been examined in detail (Evans et al., 2009). In this component of the intervention, project-based counselors at the after-school program introduced the intervention to students and helped them organize their binders according to the system. Counselors checked the students' binders against an organization checklist and provided reinforcement for correct organization during CHP meetings. Students were required to correct the organization of their binder when they did not meet all checklist criteria. Organization checklist criteria from the first 3 weeks of treatment were compared to data from the last 3 weeks of the program to calculate effect sizes. The large majority (93 %) of participants achieved effect sizes (Cohen's *d*) of 0.50 or more; 71 % demonstrated large effect sizes over 0.80. Additionally, 73 % of those who mastered the organization checklist criteria did so within the first few weeks of intervention. A majority of participants made significant gains in organizing their academic materials, and students' response to the intervention was associated with improvements in school grades. This highlights the importance of academic organization as a foundation for academic success, consistent with other findings (Langberg, Molina et al., 2011).

The CHP was modified to determine whether it could be efficacious when carried out by school-employed staff during the school day (Evans, Serpell, Schultz, & Pastor, 2007). Specifically, a mentor (e.g., teacher, coach, interventionist) was assigned to each student and trained (during daylong training sessions and provided with an 80-page manual and interactive CD-ROM) to implement the interventions (targeting assignment tracking, note-taking skills, organization, social skills, and problem solving). Interventions were implemented during brief frequent meetings with the student, with consultation provided by a research staff school psychologist. Mentors chose interventions that they thought were most relevant for the particular student and most frequently selected those targeting disorganization. Throughout the intervention, progress was monitored and changes made to the program when youth failed to demonstrate expected progress. At the end of 2 years of treatment, treatment and control groups did not significantly differ in terms of hyperactivity/impulsivity symptoms, but were significantly different in measures of inattention symptoms, with the control group getting worse over time and the treatment group improving over 2 years of treatment (Cohen's $d=0.76$). In addition, the likelihood of receiving grades that averaged lower than a "D" was significantly greater for those in the control condition (Schultz et al., 2009).

The intervention procedures of the CHP were again modified for use with a high-school-age sample and school-based mentors (Sadler et al., 2011). Additionally, a ten-session parent training group was added to the intervention procedures. The parent meetings were provided in the evenings and focused on the creation of behavior contracts at home. CHP group treatment for social impairment was provided at the same time as the parent meetings. In a sample of 24 high school students, 79 % demonstrated improvement (defined as a moderate effect size of at least 0.45) on the materials organization intervention, and 35 % improved on the planner organization intervention. Achieving this level of mastery took many students 2 months or more of consistent intervention implementation, demonstrating the importance of ongoing intervention.

There are limitations in the previous studies that could be addressed in future development and evaluation work. The after-school version of the program is labor intensive and may not be provided at some schools due to staffing limitations. Continued work is needed to find ways to integrate the interventions into the school day using school-based professionals. In addition, study results suggest that implementation over the entire academic year is better than starting the CHP when problems emerge during the second semester (Evans et al., 2011). Teacher satisfaction has been very positive for the CHP, although some have requested increased communication between counselors and teachers over the course of the year. Finally, techniques to engage families of adolescents on an individual level to address family-specific problems and obstacles to implementation are needed.

In addition to the CHP interventions targeting organization of tasks and materials, the investigators have worked to develop interventions targeting the organization of "thinking" to address problems with comprehension and social functioning. For example, a note-taking intervention was evaluated with middle school youth with ADHD to help them organize information presented to them in class, resulting in improvements in on-task behavior and comprehension (Evans, Pelham, & Grudberg, 1995). The group intervention targeting social functioning has as its foundation a focus on organizing thinking about social interactions (Sadler et al., 2011). Intervention development in the CHP is based on the hypothesis that disorganization of thinking and behavior is at the core of most problems of youth with ADHD.

The Homework, Organization, and Planning Skills Intervention

The Homework, Organization, and Planning Skills (HOPS; Langberg, 2011) intervention uses modeling, rehearsal, shaping, and contingency management to improve students' use of materials organization, homework management, and

time management skills. The HOPS intervention is an individual (i.e., 1:1), 16-session intervention, with each session designed to last no longer than 20 min. Sessions initially occur twice weekly and then move to once a week for the last six sessions. For materials organization, students are taught a specific system of book bag, binder, and locker organization and a system for transferring materials to and from school. Students are also taught how to accurately and consistently record homework assignments, projects, and tests in a planner. In the planning/time management portion of the program, students are taught how to break projects and studying for tests down into small, manageable pieces and how to plan for the timely completion of each piece. The HOPS intervention also includes two 1-h parent meetings. The goal of these parent meetings is to teach parents how to manage the HOPS checklist completion and reward implementation once the intervention period ends.

The HOPS intervention was initially examined as an 8-week after-school program with twice-weekly meetings (Langberg, Epstein, Urbanowicz, Simon, & Graham, 2008). Thirty-seven middle-school-age students with ADHD were randomly assigned to receive HOPS or to a waitlist comparison group. Students who received the intervention demonstrated marked improvements in organizing their binders, book bags, and lockers during the intervention period, and these gains were largely maintained at an 8-week follow-up. Further, at baseline, intervention and comparison participants were recording homework and tests in a planner infrequently (intervention = 30 %; comparison = 22 %). Intervention participants recorded assignments and tests 72 % of the time during the intervention period, whereas the waitlist group did not change. Intervention participants also demonstrated improvement in parent-rated homework problems on the Homework Problems Checklist ($n^2 = 0.26$) in comparison to the waitlist group, and there was a significant trend toward improved GPA for participants in the intervention group.

The investigators then modified the HOPS interventions to be implemented during the school day by school mental health (SMH) providers employed in school districts (Langberg, Vaughn et al., 2011). The modified version of the intervention was provided to 11 middle school students, each of whom had a school mental health provider assigned to work with them. The first five sessions focused on organizing materials and managing homework, the next five sessions focused on time management and planning, and the final six sessions focused on self-management and monitoring skills. The participants demonstrated significant progress in organizing materials according to checklist criteria. In addition, parent ratings of inattention ($d = 1.6$), homework problems ($d = 1.6$), and organization ($d = 1.8$) showed large improvements, with organizational skills moving out of the clinically significant problem range by the end of the treatment. Teacher ratings did not indicate significant improvement. Lastly, participants made moderate improvement in grades from the third to fourth quarters for both math ($d = 0.53$) and social studies ($d = 0.55$). Parents reported being satisfied with the program, and many teachers expressed an interest in learning more about the intervention. Importantly, these results are similar to those obtained when the interventions were provided by research staff receiving supervision (Langberg et al., 2008), providing evidence that the intervention is feasible and effective when provided by SMH providers.

Langberg and colleagues (2012) then conducted the first randomized trial of the HOPS intervention as implemented by SMH providers. Students with ADHD in grades 6–8 were randomly assigned to intervention or to a waitlist comparison. In order to ensure that the intervention manual was well suited for dissemination, no formal ongoing consultation was provided during the intervention. Students received sixteen 20-min individual sessions during the school day, focused on organization of school materials, homework management, and planning (time management). Students earned points for correct implementation of organization strategies to be exchanged for rewards. The reward system was initially implemented by the provider but was transferred to the parent through two 1-h parent meetings.

The results of this randomized trial confirm the findings obtained in earlier explorations of HOPS. Compared to the waitlist control, students in the intervention group made significant improvements in parent-rated organizational skills ($\eta^2 = 0.29$) and parent-rated homework completion ($\eta^2 = 0.22$). In addition, the intervention group made improvements in parent ratings of impairment related to organizational problems in the area of life interference ($\eta^2 = 0.28$). There were no group differences on any teacher-rated outcomes.

Importantly, participants in the intervention group had higher grade point averages than those in the control condition during the first and second quarters of intervention, and GPA did not decline during the third and fourth quarters of the year, after intervention was discontinued. This is important given the typical pattern of decline for students with ADHD (Owens, Murphy, Richerson, Girio, & Himawan,, 2008; Schultz et al., 2009). Three months after the end of the intervention, participants demonstrated a slight decline in their gains on parent ratings of task planning; however, all other treatment gains were maintained. These results suggest that organization interventions can create meaningful and enduring changes in the lives of adolescent students with ADHD. However, further research is needed to examine the lack of improvement on teacher ratings.

The Homework Intervention Program (HIP)

The Homework Intervention Program (HIP) is a program designed to help parents manage their adolescents' homework completion. It was developed based on the homework intervention used in the parent training portion of the CHP (Evans, Langberg, et al., 2005). HIP specifically targets homework as integral to academic performance (Raggi, Chronis-Tuscano, Fishbein, & Groomes, 2009). HIP consisted of four 90-min clinic-based sessions, held jointly with parent and adolescent, and one session with parent and teacher. The intervention was intended to modify antecedents and consequences related to homework and was implemented by the lead investigator, an advanced doctoral student. Teachers provided organizational supports to students, such as signing planners to verify accuracy of assignments or providing a peer buddy to help the student pack materials in the backpack. Children were provided with training in time management and goal setting.

The HIP was evaluated with 11 middle school participants ages 11–13. Participants demonstrated significant improvement in parent-rated homework problems, falling below the cutoff for clinically significant problems on the Homework Problems Checklist by the end of treatment (Raggi et al., 2009). The large majority of students achieved a slight increase in GPA (on average, from a C + to a B-). A majority of participants also experienced a decrease in inattentive symptoms according to parent report. Sixty percent of participants demonstrated an improvement in academic productivity according to the majority of teacher reports; for the other 40 %, the students' multiple teachers showed low levels of agreement regarding student progress. Gains were maintained at 3-month follow-up. Parents reported high levels of satisfaction, while adolescent participants reported moderate levels of satisfaction. Like the Homework Success Program, HIP was implemented in a clinic setting and has not yet been evaluated in a school. The original CHP procedures from which HIP was developed have been provided in a school setting, but not specifically evaluated in isolation. Future research might focus on replicating these results in a larger sample with a control group. However, this study offers preliminary support for the utility of the home-based homework intervention.

Medication and Organizational Deficits

It is generally accepted that psychopharmacological treatment is a primary intervention for the symptoms of ADHD (e.g., impulsivity, inattention, difficulty sitting still); however, the effects of medication on organizational and other cognitive deficits are much less well understood. In a study of children with ADHD (ages 8–13), Abikoff and colleagues (2009) reported that methylphenidate produced improvements in both

ADHD symptoms, as well as organization, time management, and planning (OTMP), compared to placebo, according to both parent and teacher report ($d = 0.78$ and $d = 1.20$ for symptoms; $d = 0.68$ and $d = 0.86$ for OTMP behaviors, respectively), with improvements in OTMP apparently mediated by changes in symptoms. The authors note that in the case of a *performance* deficit in OTMP behaviors, OTMP may improve once the interfering ADHD symptoms have been attenuated. However, for some children, OTMP impairments may reflect a *skill* deficit; thus, additional skill-building intervention may be needed.

In general, the research seems to suggest that medication is neither necessary nor sufficient in improving the organization of all students with ADHD. Medication may help students to be more attentive, which may facilitate compliance with intervention procedures during sessions, but psychosocial interventions may be needed to improve organizational skills (Langberg et al., 2010). Certain subgroups of students with ADHD may be more likely to achieve organizational benefit from medication. Hale and colleagues (2011) demonstrated that those with greater impairment in executive functioning at baseline demonstrated greater cognitive improvements on medication. Notably, cognitive functioning was optimized on a lower dose of medication, while the behavioral presentation was optimized on a higher dose (Hale et al). These findings highlight a need to further investigate the role of medication in addressing cognitive aspects of ADHD, including organizational deficits, separately from the effects of medication on behavioral symptoms.

Some studies conclude that students respond similarly to psychosocial intervention, regardless of whether they are concurrently taking medication (Gureasko-Moore, DuPaul, & White, 2006). Other studies show that youth taking medication actually benefitted *less* from the psychosocial intervention, possibly due to greater initial severity in the medicated group. For example, in the Challenging Horizons Program, high school students who did not master organization criteria were more likely to be taking medication (Sadler et al., 2011), and middle school students taking medication had lower initial GPA and less change in GPA during the treatment year (Evans et al., 2007). Other evidence suggests that medication may, in fact, facilitate treatment outcomes of an organization intervention. In the Family-School Success program (Power et al., 2012), the program's effects on homework behavior were stronger for those students on medication. Further, in the MTA, combined (psychosocial + medication) treatment was the optimal treatment for children of moderate ADHD severity in improving homework problems (Langberg et al., 2010). These implications for the role of medication on response to organization interventions are based on some studies with small samples, and additional research is needed before drawing conclusions about the role of medication with these interventions.

Psychosocial intervention may have an advantage over medication in that many parents find these interventions more acceptable than medication for their children. For middle school students participating in the CHP, 92 % of parents whose children demonstrated a need for treatment modification requested an alteration to the psychosocial interventions rather than a medication trial (Evans et al., 2007). Similarly, in the Power and colleagues (2012) study, only 55 % of parents accepted the medication trial that was offered prior to the psychosocial intervention. Additionally, given that there is a decline in medication use during adolescence, at the same time that demands on independent organizational skills increase, it is important to provide adolescents with ADHD with necessary organizational skills.

Discussion

The organization interventions discussed vary considerably in terms of the structure and specific content of the intervention. However, the general intervention strategies are similar across interventions, and there are a number of commonalities in outcomes. Many programs included a youth-focused intervention component consisting of teaching youth to monitor their own behavior more effectively and reinforcing them for demonstrating progress. These strategies often included skill-building instruction and practice, as well as the use of external organizational aids.

Many of the programs included a parent-focused and/or teacher-focused component focused on teaching adults to monitor, encourage, and reinforce the organizational behavior of children. Although the specific strategies vary from one intervention to the next, the mechanisms of change are largely consistent. Research has begun to investigate the unique contributions of various intervention components, but this continues to be an area for further exploration.

Importantly, the interventions discussed above were all generally found to be acceptable and feasible. In addition, several studies equipped regular school staff to implement the interventions rather than relying on heavily trained university-affiliated personnel. Relatively minimal training was required, and the time demand was fairly low for many of the interventions. This is important in that it suggests that these interventions are feasible, acceptable to school stakeholders, and sustainable in that they are not dependent on research staff or other resources. Thus, these interventions may be widely disseminated in order to improve the organizational skills, and thus the academic performance, of youth with ADHD.

The literature reviewed can also inform the length of intervention that may be necessary to address the organizational deficits of youth with ADHD. Given that ADHD is a chronic condition, it is important to examine the durability of intervention effects and the relative value of continuing interventions long term. Evans and colleagues (2007) examined the benefit to youth in the CHP of participating for more than one school year. They found that, despite fairly small effect sizes during the first year, treatment gains continued to increase over time, reaching a moderate effect size of 0.76 for youth who participated for 2.5 years. Furthermore, many of the high school students receiving organization interventions required over 2 months to master the intervention, suggesting that quick or immediate responses to these interventions may not occur for many students (Sadler et al., 2011). In addition, there may be incremental benefit of continued participation in organization interventions over many months. Small doses of intervention over extended time may be more beneficial than intensive, short-term interventions.

It is important to understand the way in which improvement in organizational abilities (a proximal outcome) is related to more distal outcomes, such as academic grades and productivity. The research reviewed suggests that improvements in organizational skills are indeed associated with benefits in important areas of functioning. For example, in the Organizational Skills Training program, gains were made in aspects of family functioning, perhaps reflecting reduced organization-related family conflict and homework difficulties. Similarly, in the Homework Success Program, parents reported reduced parenting stress. Further, evidence suggests that psychosocial interventions, such as those provided in the CHP, are effective in reducing or delaying the academic failure that often occurs for students with ADHD during the course of the school year (Schultz et al., 2009). Future research may focus on the connection between organization and academic performance and the mechanisms of change that may be involved.

In many of the studies reviewed, proximal organizational objectives were used as measures of treatment progress (e.g., number of criteria met on an organization checklist). However, apart from the Children's Organizational Skills Scale (COSS; Abikoff & Gallagher, 2009), there are no validated measures of organizational skills for children. Thus, it is difficult to measure progress in the development of organizational skills, and researchers often measured more distal outcomes (e.g., grades, family conflict). Arguably, these more distal outcomes are more meaningful to families and other stakeholders than are proximal measures of organizational skills. However, more direct measures are important in providing accurate estimates of treatment effects and in understanding mechanisms of change. Thus, future research is needed to determine more direct methods of assessing developmentally appropriate organizational skills.

Another issue related to outcome measurement is that teacher-rated improvement is often smaller than parent-rated improvement. This may occur for several reasons. Teachers may be less familiar than parents with the organizational behaviors of students. Changes at home are not

evident to teachers. Regardless, the lack of positive outcomes on teacher report is concerning. Because organization interventions aim to improve academic productivity and achievement, observed change in the school setting would support the validity of improvements.

Importantly, much of the literature reviewed is related to organization interventions targeting school-related organizational behavior. However, youth with ADHD demonstrate organizational deficits across multiple areas of their lives (e.g., social, home). In addition, emerging research has suggested that organization interventions may be effective in impacting other areas of functioning. For example, the Interpersonal Skills Group intervention used in the CHP aims to improve students' social skills through instruction in organization of social thoughts (i.e., problem-solving steps) and behaviors (i.e., using behavioral observations to assess and adjust one's own social performance) and has demonstrated preliminary efficacy (Evans, Langberg, et al., 2005; Sadler et al., 2011). The intervention applies organization strategies to target important developmentally appropriate social tasks during adolescence (Cicchetti & Rogosch, 2002).

The literature on interventions targeting the disorganization of tasks, materials, and time suggests that this is an important focus for many children and adolescents with ADHD. Emerging research suggests that there is potential to develop similar strategies addressing other areas of impairment for youth with ADHD. Such interventions would likely benefit from modeling strategies after those that have been demonstrated to be effective in the academic domain. Specifically, a combination of skills training, increased monitoring, and behavioral contingencies have been shown to be effective in altering the organizational behavior of youth with ADHD.

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Response to Intervention for Youth with Attention-Deficit/ Hyperactivity Disorder: Incorporating an Evidence-Based Intervention Within a Multi-tiered Framework

Rebecca K. Vujnovic, Alex S. Holdaway, Julie Sarno Owens, and Gregory A. Fabiano

Response to intervention (RTI) refers to a collection of practices aimed at the timely identification of student problems to enhance achievement and behavioral outcomes in a cost-effective manner. Among the RTI models that have been investigated (e.g., Ikeda, Tilly, Stumme, Volmer, & Allison, 1996; Kovaleski, Tucker, & Stevens, 1996; Telzrow, McNamara, & Hollinger, 2000), there are similar components that distinguish RTI from other education models. Namely, RTI (a) utilizes practices to identify students based on risk, as opposed to deficit, resulting in the early identification of students who may be struggling; (b) provides high-quality supplemental instruction or behavioral support to mitigate risks as soon as difficulties are noted; and (c) uses data-driven progress monitoring tools to determine a child's response to intervention and need for additional intervention (Rathvon, 2008; Vaughn & Fuchs, 2003).

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To date, there is limited evidence demonstrating the efficacy or feasibility of RTI beyond early elementary school-age students and in content areas beyond reading (Brown-Chidsey & Steege, 2010; Rathvon, 2008; Vaughn & Fuchs, 2003). Yet, there is significant potential in the use of RTI to identify and address the educational needs of youth with disruptive behavior disorders, such as attention-deficit/hyperactivity disorder (ADHD). It is estimated that 3–5 % of the general education population (American Psychiatric Association, 2000) and approximately 60 % of students in the special education categories of emotional disturbance (ED) and other health impaired (OHI) have ADHD (Schnoes, Reid, Wagner, & Marder, 2006; Wagner, Marder, & Blackorby, 2002). Further, there are several evidence-based classroom interventions for students with ADHD that can be delivered in general and special education classrooms (DuPaul & Stoner, 2003; DuPaul, Weyandt, & Janusis, 2011; see Pelham & Fabiano, 2008 for a review). However, to date, there has been little exploration into how evidence-based interventions, specific to students with ADHD, can be applied within the RTI model.

The purpose of this chapter is to demonstrate how evidence-based classroom interventions for youth with ADHD can be applied using the RTI framework. To achieve this goal, we will focus our discussion and demonstration on the Daily Report Card intervention (DRC; Kelley, 1990), as it is the most widely used and studied classroom

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intervention for ADHD (Pelham & Fabiano, 2008; Pelham, Wheeler, & Chronis, 1998). However, because many evidence-based classroom interventions for ADHD incorporate behavior principles similar to those used in the DRC, the procedures outlined in this chapter can be applied to other evidence-based interventions including token economies, response cost programs, and interventions targeting homework and organization. In the first half of the chapter, we provide a brief overview of RTI, discuss the association between ADHD and academic impairment that underscores the need for an RTI approach to services for these students, and describe our rationale for selecting the DRC intervention as an exemplar intervention. In the second half of the chapter, we then demonstrate how the DRC can be applied using a three-tiered RTI approach.

Overview of Response to Intervention (RTI)

Under the final regulations of the reauthorized Individuals with Disabilities Education Improvement Act (IDEA) published in 2006, RTI can be used both as a tool for determining eligibility for special education services and as an organizing framework for a multi-tiered, school-wide approach to instruction and behavioral supports. In this chapter, we will focus on the latter. It is important to note that among the various RTI models that have been investigated, there are more similarities than differences and no one model has been supported as the model of choice (Bradley et al., 2007; Musgrove, 2007). Therefore, we believe the information provided in this chapter is likely applicable to most common configurations of the RTI model.

According to the US Department of Education sponsored National Center on Response to Intervention [NCRTI] (2010, p. 2), RTI is described as follows:

> Response to intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavioral problems. With RTI, schools use data to identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities or other disabilities.

A school-wide, multi-level instructional and behavioral system typically includes three increasingly intensive tiers of programming (see Fig. 1). At the lowest level, Tier I represents the general education curriculum or classroom management system and is provided to all students. Purportedly, Tier I programming meets the needs of most students (80 %), and for the 20 % of students who do not respond adequately to Tier I programming, Tier II supports are added. Tier II programming is designed to provide a student with additional opportunities to practice skills matched specifically to his/her skill deficit (Vaughn, 2003). This level of support typically includes supplemental small group instruction, small group behavioral skill building (e.g., social skills, anger management), brief behaviorally focused interventions (e.g., check-in/checkout system; Hawken & Horner, 2003), or individualized interventions that can be conducted in the general education classroom (e.g., behavioral contracts, Daily Report Cards). Tier III includes intensive, systematic, evidence-based interventions intended for a small percentage of students (5 %) who are unresponsive to programming at Tiers I and II (Fuchs & Fuchs, 2007). Tier III interventions represent the most intensive level of support and occur individually or in a small group setting (i.e., 2–3 students). Tier III often includes a comprehensive evaluation to identify whether a child has a specific disability and/or meets eligibility criteria for special education programming (Fuchs & Fuchs).

Within an RTI framework, all students participate in universal screening to measure each student's present level of skill attainment and behavior commensurate with same-aged peers. NCRTI (2010) defines universal screening as "brief assessments that are valid, reliable, and demonstrate diagnostic accuracy for predicting which students will develop learning or behavioral problems" (p. 8). Results help to inform the early identification of students who may be at risk for poor outcomes. With a multi-tiered prevention system in place,

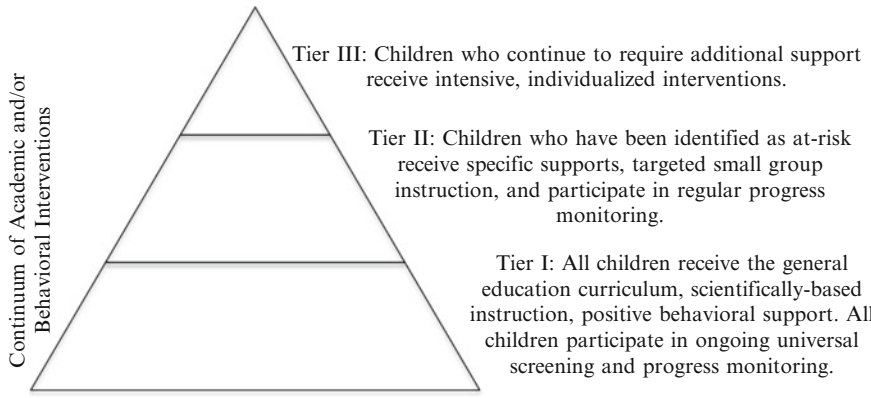

Fig. 1 Multi-tiered response to intervention (RTI) framework

universal screening allows educators to match each student's skill performance to subsequent instruction within the system by systematically evaluating all students. As a result, students who are making adequate progress and meeting age-level expectations will continue to receive instruction at Tier I, whereas students who may be at risk for potentially poor outcomes may receive instruction at Tier I as well as Tiers II and/or III to facilitate the development of targeted skills.

The RTI approach relies heavily on data collection and progress monitoring to inform the provision of instruction to meet the needs of each student. NCRTI (2010) defines progress monitoring as "repeated measurement of performance to inform the instruction of individual students in general and special education" (p. 8). Students who require supplemental services at Tiers II or III should be routinely monitored throughout their participation in supplemental instruction. The progress monitoring data are used to determine whether the current programming is effective in facilitating the student's growth and skill development and to quantify the rate of improvement. Adjustments to the intensity and nature of Tiers II and III interventions may be made to enhance skill development, as well as to increase the (a) frequency of instructional sessions or behavioral feedback, (b) duration of instructional sessions, or (c) specificity of the student's target behaviors, and reducing the size of the group (NCRTI).

In application, there is preliminary evidence that the provision of early intervention services results in decreased referrals for special education evaluations, successfully maintains students in their general education classrooms, and improves indicators of disproportionality (i.e., effectively decreasing the overidentification of males and minority children for special education; VanDerHeyden, Witt, & Gilbertson, 2007). However, to date there is limited evidence demonstrating the efficacy or feasibility of specific RTI models, and such evidence is limited to early elementary school ages and to educational programming in reading (Brown-Chidsey & Steege, 2010; Rathvon, 2008; Vaughn & Fuchs, 2003). When applying RTI to behavioral programming, the essential components of the RTI framework remain; however, the application of these components requires unique consideration. A comparison of the RTI framework for academic versus behavioral programming is highlighted in Table 1. Recent exploration of RTI for behavioral concerns has proposed RTI methods for identifying students as emotionally disturbed (ED; Gresham, 2007) and has provided guidance as to the implementation of behavioral interventions across RTI tiers (Gresham, 2004; Hawken, Vincent, & Schumann, 2008). However, there has been less exploration into how evidence-based interventions, specific to students with ADHD, can be applied within the RTI model.

Table 1 Comparison of the response to intervention (RTI) approach for academic versus behavioral programming

	RTI component	RTI for academics	RTI for behavior
Tier I	Assessment: universal screening	Brief fluency-based measures administered directly to the student	Behavioral rating scales/direct classroom observations/office discipline referrals/attendance rates/tardiness
	Universal programming	Research supported core curriculum	Evidence-based classroom management practices and school-wide behavioral supports
Tier II	Assessment: progress monitoring	Monthly or bimonthly brief fluency-based measures administered directly to the student	Direct observations/daily progress reports (e.g., Daily Report Cards [DRC], Daily Progress Reports [DPR], Monthly Review Teams)
	Targeted intervention	Supplemental instruction which is delivered to a small group of students in the general education classroom	Modifications or extensions of existing behavioral support strategies that can be implemented in the general education classroom
Tier III	Assessment: intensive progress monitoring	Weekly administration of brief fluency-based measures administered directly to the student	Direct observations/daily progress reports (e.g., Daily Report Cards [DRC], Daily Progress Reports [DPR], Monthly Review Teams)
	Individualized intervention	Individualized academic interventions and/or more restrictive learning placements	Individualized behavior support plans and/or more restrictive placements based on functional behavioral assessment data

Potential Impact of ADHD on Academic Progress and Classroom Behavior

ADHD is the most commonly diagnosed childhood behavior disorder, occurring in up to 3–5 % of school-aged children (American Psychiatric Association, 2000). Many of the symptoms experienced by children with ADHD produce academic and behavioral difficulties in the classroom that often require additional supports (Massetti et al., 2008; Raggi & Chronis, 2006; U.S. Department of Education, 2008). The behavioral manifestations of ADHD include noncompliance with adult instructions, distractibility, poor organization skills, incomplete assignments and tasks, and excessive movement or noise in the classroom. These behaviors make it difficult for students with ADHD to acquire knowledge and skills in school and to function successfully in the classroom (Rapport, Scanlon, & Denney, 1999; Volpe et al., 2006). Indeed, these behavior problems have been linked to teacher- and parent-rated impairment in academic and behavioral performance (Lahey et al., 1994), both of which persist over time (Kent et al., 2010; Massetti et al., 2008).

Because of these impairments, children with ADHD are often referred for costly special education services. Data from the Special Education Elementary Longitudinal Study (SEELS; Schnoes et al., 2006) indicates that 66 % of students in the OHI category, 58 % of students in the ED category, and 20 % of students in the learning disabilities (LD) category were diagnosed with ADHD. Further, it has been estimated that the cost of educating a child with ADHD is 16 times greater than the cost of educating a child without ADHD, largely due to special education, grade retention, and disciplinary referral costs (Robb et al., 2011). By applying the principles of RTI to the management of behaviors associated with ADHD that interfere with academic performance (i.e., quality classroom management,

universal screening, strategic assessment, and the implementation of evidence-based interventions within a multi-tiered prevention system), each school district has the opportunity to save hundreds of thousands of dollars annually. In summary, the behavior of many children with ADHD often leads to academic impairments, classroom disruption, and costly additional support services. These findings highlight the need for a systematic approach to reducing behavior problems associated with academic impairment, as well as unnecessary referrals to costly and possibly restrictive special education placement.

The Daily Report Card as a Multi-tiered Intervention: Rationale for Selection

The Daily Report Card (DRC) is among the most widely studied and frequently recommended classroom interventions for students with ADHD (US Department of Education, 2008). Studies have documented the efficacy of the DRC when used individually or as part of a multicomponent intervention system (Fabiano et al., 2010; Jurbergs, Palcic, & Kelley, 2007; Kelley & McCain, 1995; Murray, Rabiner, Schulte, & Newitt, 2008; O'Leary, Pelham, Rosenbaum, & Price, 1976; Owens, Murphy, Richerson, Girio, & Himawan, 2008; Vannest, Davis, Davis, Mason, & Burke, 2010; Wells et al., 2000). Below, we provide a description of the DRC, as well as the many reasons that this intervention is amenable to implementation in an RTI framework.

The DRC is a tool to modify clearly defined target behaviors (e.g., interruptions, work completion) that, when addressed, would likely improve academic and behavioral performance. When using the DRC, the teacher provides feedback to the student about each individualized target behavior, and the student's performance on each target is evaluated in relation to a predetermined goal. At the end of the day, DRC performance is reviewed by teachers and/or parents, and the student is provided with privileges (school-based or home-based) contingent upon their daily success. Details about implementing the DRC are publically available (Evans, Owens, Reinicke, Brown, & Grove, 2013; Kelley, 1990; Pelham, 2002; Volpe & Fabiano, 2013).

There are several reasons why the DRC is particularly amenable to the RTI process. First, there are many dimensions (e.g., number of target behaviors, specificity of target behavior, frequency of feedback, frequency and location of contingent privileges) that can be adjusted to align with the needs of a given tier of intervention. Indeed, there is evidence that the DRC has utility for students with ADHD in both general (e.g., Owens et al., 2008; Owens et al., 2012) and special education settings (Fabiano et al., 2010). Second, the DRC has been rated as acceptable to teachers (Girio & Owens, 2009; Power, Hess, & Bennett, 1995) and facilitative of home-school communication (Power, Soffer, Clarke, & Mautone, 2006). Third, the DRC functions as both an intervention and a progress monitoring tool (Chafouleas, Riley-Tillman, & McDougal, 2002), thus producing data that can be used to make decisions about movement across tiers. Fourth, the DRC can be flexibly applied to a variety of behaviors (e.g., disruptive behaviors, academic productivity targets; Chafouleas, Riley-Tillman, & Sassu, 2006) and tailored to meet an individual student's needs over the entire school year. Thus, new goals can be added without the need for additional teacher training or infrastructure (Pelham, 2002), potentially providing a cost savings for school districts (e.g., Robb et al., 2011). Lastly, the DRC combines many elements of recommended evidence-based classroom management strategies (Epstein, Atkins, Cullinan, Katash, & Weaver, 2008) and is an easy extension of what many teachers may already be using in their classroom. Historically, the DRC has likely been used as a Tier II intervention. However, given the characteristics described above, we argue that this intervention can also be applied within Tier 1 and Tier III. Next, we provide a description of how the DRC may be integrated with the RTI model and conclude with possible avenues for future research in this area.

The DRC as a Tier I Behavioral Intervention

Tier I behavioral strategies are those that are applied across all students and that can be integrated into a teacher's daily routine. Thus, Tier I behavioral strategies can be conceptualized as effective class-wide behavior management (Epstein et al., 2008). At this lowest level, the DRC may simply be represented by a brief note (e.g., "Good News Note") that is sent home at the end of each day (or emailed to parents daily) for each child who has demonstrated appropriate behavior at school. It serves as a daily form of communication to parents as well as a progress monitoring tool that can be used to judge each student's response to general classroom behavior strategies. There are several ways that teachers can implement this DRC strategy at Tier I. First, teachers could define a threshold of classroom rule violations that constitutes "good behavior" (e.g., two or fewer rule violations per day). Any child who has maintained this level of behavior receives a Good News Note (see Fig. 2). The absence of such a note would be an indication that the child had a more challenging day (Pelham et al., 2005). Alternatively, teachers could rate each child on a predetermined target behavior (e.g., respectful behavior), and children receiving an acceptable rating (e.g., respectful at least 80 % of the day) would receive a Good News Note home at the end of each day (e.g., http://www.directbehaviorratings.com/index.html; Chafouleas, Riley-Tillman, & Christ, 2009; Christ, Riley-Tillman, & Chafouleas, 2009). Using either of these two approaches is compatible with existing class- or school-wide behavior programs such as the school-wide positive behavior support (SWPBS) program (Sugai & Horner, 2002).

A DRC note in conjunction with Tier I strategies can increase the frequency of positive comments coming from school to home and facilitate home-school collaboration, thereby growing the investment of families in the child's behavior at school. In addition, these home notes serve as valuable, inexpensive assessment and progress monitoring tools, offering data for tier-based decision making. For example, over the course of 2 weeks, the teacher may record the number of Good News Notes sent home or the number of daily behavior ratings in which the child fell below peers (e.g., child is disruptive more than 20 % of the school day). In many classrooms, such as those using SWPBS, these data are already available, yet not used to their full potential as a means for home-school communication, assessment, or progress monitoring. With minimal additional effort and expense, adding a DRC note to a general classroom behavior management routine may be an efficient tool to satisfy the criteria needed to determine if more intensive and costly interventions are necessary. Using these data, children who fall below behavioral expectations may be referred for additional behavioral support at Tiers II or III (Chafouleas et al., 2009).

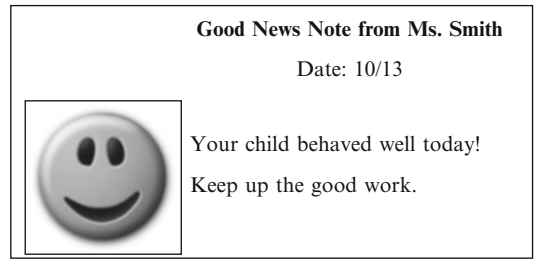

Fig. 2 Example of a Tier I Daily Report Card

The DRC as a Tier II Behavioral Intervention

The DRC is especially well suited for a Tier II behavioral intervention, as it acts both as an intervention and a progress monitoring tool that can be used as an evidence-based pre-special education referral intervention. Yet the Tier II DRC requires greater operationalizing and individualizing of the target behaviors (e.g., interruptions, off task, noncompliance; see Fig. 3). The Tier II DRC is individualized to the child's specific behavioral concerns and includes specific criterion for meeting the behavioral goals (e.g., interrupts six or fewer times). Teachers provide the child with immediate feedback at the point at

Fig. 3 Example of a Tier II Daily Report Card

Name: Sam		**Date**: 10/13
	Daily Tracker	Daily Goal Met
1. Remains seated with **3 or fewer** instances of leaving seat	/ / / /	Y (N)
2. Raises hand to speak with **3 or fewer violations**	/ /	(Y) N
3. Completes **75%** of daily math work	80%	(Y) N
	Total Number of Yeses	2
	Percent	66%
Teacher Comments: *Sam worked very hard today.*		
Parent Signature:		
Parent Provided a Reward at Home: Y N		

which the behavior occurs (i.e., label the behavior and connect that behavior to the DRC; "That is an interruption, and a tally mark on your daily card"). The Tier II DRC meets the criterion for "repeated progress monitoring," as data are available on a daily basis and can be graphed for review at monthly team meetings and/or parent/teacher conferences. Further, as the child makes progress, the criterion for meeting each goal is gradually and continually modified to shape the child's behavior into the desired range. The Tier II DRC also requires the development of a reward system (e.g., home-based rewards requiring more engagement with parents or a brief individualized school-based reward program) in which the student may earn rewards contingent on appropriate school behavior. Sample home- and school-based rewards can be found at http://casgroup.fiu.edu/ccf/pages.php?id=1401 (see How to Establish a Daily Report Card). Given that the Tier II DRC is more intensive, it is likely that teachers would require additional practice, training, and support in implementing the Tier II DRC with high integrity (e.g., Murray et al., 2008; Owens et al., 2008; Vujnovic, Fabiano, Pariseau, & Naylor, under review).

Similar to the decision process to progress from Tier I to Tier II, there are limited guidelines as to what constitutes response or non-response for behavioral Tier II interventions. One indicator of a positive response is the reduction of a target behavior goal criterion (e.g., lowering the criterion for interruptions from 6 or fewer to 4 or fewer). A guideline commonly used for making such a change is that criterion should be lowered after the child has earned his/her goal on a given target for 4 out of 5 days for 2 weeks (Pelham, 2002). However, there are no specific empirical studies that validate the use of this guideline. A recent study examined the percent of elementary school children with disruptive behaviors who respond positively (identified through latent class statistical procedures) to a Tier II DRC intervention and the extent to which students achieve incremental benefits with each month of intervention in a general education setting (Owens et al., 2012). The majority of students (72 %) showed a positive response to the intervention, achieving continued improvement across a 4-month intervention period. In addition, a differential pattern emerged for DRC responders and nonresponders. Both groups showed a positive response at the end of the first month. However, by the end of the second month of intervention, the nonresponders showed deterioration in target behaviors, whereas the responders

demonstrated another month of incremental improvement. This suggests that teachers should implement and monitor the DRC for up to 2 months before considering a discontinuation. If by the end of 2 months the child has shown deterioration in the context of continued DRC intervention, other Tier II interventions or a move to Tier III is warranted. This study (Owens et al.) provides preliminary guidance regarding how long a teacher should persist at utilizing a Tier II DRC intervention before alternative or supplemental services are sought. Yet, additional research is needed to empirically define a positive response to DRC intervention.

The DRC as a Component of a Tier III Behavioral Intervention

A Tier III DRC differs from a Tier II DRC with regard to the number of settings in which the DRC is used (e.g., classroom and lunch room), the frequency and intensity of the intervention (e.g., feedback and rewards provided more often), and the level of coordination between home and school and among multiple professionals providing services (see example in Fig. 4). A student's move to Tier III services often initiates a referral for a special education assessment. This assessment often includes a functional behavior analysis (FBA) to determine the antecedents and variables that may be associated with the unresponsiveness to Tier II interventions (Hawken et al., 2008) and that may directly inform the development of a Tier III DRC intervention. Whereas the DRC may have been a stand-alone intervention in previous tiers, when used at Tier III, the DRC is more likely to be a component of a more comprehensive intervention package comprised of multiple evidence-based supports (e.g., behavioral parenting training, medication; Wells et al., 2000). Thus, consideration should be given to how the Tier III DRC dovetails with these other interventions. For example, the Tier III DRC provides a mechanism for monitoring a child's response to a medication trial (e.g., Pelham et al., 2001). If parents are receiving behavioral parent training sessions, the topics of praise, token economies, home-school communication, and homework management procedures can be linked to DRC behavior targets and reward procedures. Further, the Tier III DRC may include space for multiple teachers or specialists to keep track of student behavior for children who move between multiple classrooms (e.g., special education and general education) and may be designed to shorten the period of time between rewards (e.g., morning and afternoon rewards).

When used as an intervention for students receiving special education services, the DRC has resulted in positive effects on observations of classroom functioning, teacher ratings of academic productivity and disruptive classroom behavior, and greater attainment of individualized education plan (IEP) attainment (Fabiano et al., 2010). Further, the DRC demonstrated strong clinical significance, as children diagnosed with ADHD in special education who received a DRC intervention demonstrated normalization on measures of disruptive behavior and impairment (Fabiano et al.).

Factors Affecting Implementation of the DRC

Although RTI provides a promising framework for the promotion and implementation of the DRC, careful consideration must be given to the integrity with which the interventions are delivered, flexibility and persistence of individuals providing these services, and forethought as to the utility of data gathered. Poor treatment integrity can be a significant problem. Inconsistent or inappropriate implementation can severely compromise positive outcomes (Durlak & Dupre, 2008). Research suggests that the integrity with which teachers deliver behavioral classroom intervention is acceptable during the first few days or weeks of implementation, but that integrity declines steeply in the absence of ongoing consultation from behavioral specialists or school mental health professionals (Noell, Witt, Gilbertson, Ranier, Freeland, 1997; Witt, Noell, LaFleur, Mortenson, 1997). If low intervention

Name: Sam	**Morning**						**Afternoon**					
Date: 10/13	Reading			Math			Social Studies			Science		
	Tracker	Goal Met		Tracker	Goal Met		Tracker	Goal Met		Tracker	Goal Met	
1. Remains seated with **2 or fewer** instances of leaving seat	/ /	(Y)	N	/ /	(Y)	N	/ /	(Y)	N	/ /	(Y)	N
2. Raises hand to speak with **3 or fewer violations**	/ /	(Y)	N	/ /	(Y)	N	/ /	(Y)	N	/ /	(Y)	N
3. Completes 75% of daily work	60%	Y	(N)	75%	(Y)	N	75%	(Y)	N	100%	(Y)	N

Total Number of Yeses (AM):	5/6 = 83%	**Morning Reward Provided at School:**	Y N
Total Number of Yeses (PM):	6/6 = 100%	**Afternoon Reward Provided at School:**	Y N

Teacher Comments:

Sam was very distracted during reading in the morning, but improved in math and had a great afternoon.

Parent Signature: **Reward Provided at Home:** Y N

Fig. 4 Example of a Tier III Daily Report Card

integrity interferes with a student's response to treatment, such integrity may result in the student unnecessarily being identified for more intensive and costly supports. Therefore, it is recommended that an effective maintenance program include periodic classroom observations of teacher implementation and "booster" consultation sessions to reinforce treatment principles with explicit performance feedback to teachers to support integrity (Jones, Wickstrom, & Friman, 1997). Indeed, there is evidence that with continued consultation, the DRC has demonstrated feasibility and effectiveness as an intervention for the duration of the entire school year (Owens et al., 2008; Vujnovic et al., in press).

Additionally, the flexibility and persistence of treatment delivery are likely important for treatment outcomes. If a DRC is not producing a desired response, it may be that one aspect of the DRC or the treatment delivery process warrants modification to enhance treatment effectiveness at that tier. For instance, a reward that was once attractive to a student may no longer be salient and produce the necessary motivation for the desired behavior. Additionally, it may be that target behaviors that were initially identified are not capturing the primary behavior of concern to the teacher. In such cases, problem solving and DRC modification should occur prior to moving the child to the next tier of intervention (see Pelham, 2002, for a troubleshooting guide). Similarly, persistence with treatment delivery is critical. The behavior of children with ADHD can be highly variable, and treatment response is unlikely to show uniform improvement from day to day, or even week to week. The DRC has been shown to be effective in reducing problem behavior for a large majority of elementary school-age children with ADHD, but this improvement is a gradual process wherein normalized levels of child behavior may not be achieved until 2–4 months of intervention (Owens et al., 2012). Thus, expectations should be oriented towards a gradual improvement of behavior that is still inclusive of day-to-day variability that may make it especially difficult to discern patterns of

response over time without the benefit of data tracking and graphing.

Finally, it is important to carefully define how data from a DRC or other behavioral interventions may be utilized. Federal guidelines suggest that non-response to an evidence-based intervention should be demonstrated before increasing services to a Tier II or Tier III intervention. However, these guidelines do not say specifically how non-response should be defined or operationalized. Similarly, there are no agreed upon cutoffs or guidelines available in the research literature for this purpose. Thus, until empirically derived guidelines are available for defining response and non-response, systematic data collection and prudent data-driven decisions that consider the best interests of the child are recommended.

Future Research

The educational policy shift to RTI has many potential benefits including (a) early identification and early intervention for students with or at risk for ADHD, (b) implementation of evidence-based classroom interventions across a multi-tier system to mitigate risk, and (c) data-driven decision-making procedures that monitor the needs and functional impairments of the child. These benefits allow the child to receive intervention in the general education environment and reduce costs for school districts by placing children in special education or restrictive placements only after other options have been attempted. Although potential advantages are theoretically grounded, most of them are largely untested empirically. For instance, the RTI model assumes that the best outcomes are produced by providing intervention for all children at Tier I, and only adding subsequent intervention (i.e., Tier II and Tier III) if the child is non-responsive to Tier I. Yet this is an untested assumption. Alternatives to this include a model in which all children receive comprehensive Tier III interventions and such interventions are gradually withdrawn as progress is made, or a life course approach (See Evans, Owens, Mautone, DuPaul, & Power, this volume) in which evidence-based interventions are carefully selected based on a framework that prioritizes the impact of early life experiences and treatment decisions on outcomes later in childhood and in adulthood. Yet this is an untested assumption. Similarly, proponents of the model assert that 80 % of children will not need Tier II or III supports. Additional research is needed to support this claim. Further, much of the research that has been conducted on RTI has been focused on the outcomes of academic interventions (primarily reading) rather than on the academic and behavioral outcomes of behavior interventions such as the one proposed in this chapter. Ultimately, the RTI model, and its many components, must be critically evaluated and compared to alternative models to determine the accuracy of these assumed benefits. This chapter provides an early attempt at explaining the logistics for the integration of the DRC and the RTI model in a manner that could be implemented and tested for incremental benefit above and beyond alternative models of behavioral intervention deployment in an elementary school setting. Future research should continue to explore how additional behavioral treatments for students with ADHD align with an RTI framework and devise guidelines and best practices for integrating such programs.

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Toward a Comprehensive Life-Course Model of Care for Youth with Attention-Deficit/ Hyperactivity Disorder

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Students with attention-deficit/hyperactivity disorder (ADHD) exhibit developmentally inappropriate levels of inattention and/or hyperactivity-impulsivity on a chronic basis across settings (American Psychiatric Association, 2000). The disorder is diagnosed in 5–10 % of children, representing approximately 5.4 million children in the United States (Visser & Lesesne, 2005). ADHD typically is associated with significant academic impairment including below grade level academic achievement, grade retention, and high school dropout (Barkley, Murphy, & Fischer, 2008; Frazier, Youngstrom, Glutting, & Watkins, 2007). In part due to their high rates of disruptive, noncompliant, and intrusive social behavior, students with ADHD also experience significant difficulties building positive relationships with peers and adults (Stroes, Alberts, & Van Der Meere, 2003). Adolescents with ADHD experience greater risk for substance use, teen pregnancies, driving accidents, and delinquent behavior (Wolraich et al., 2005).

In spite of the availability of evidence-based practices for youth with ADHD, many do not receive them. Furthermore, many of the best practice guidelines and models of care tend to be based on short-term benefit and focused on keeping service delivery costs at a minimum. In this chapter, we propose and describe an alternative model of care for children and adolescents[1] with ADHD that emphasizes a life-course perspective, that is, a framework that carefully considers the long-term implications and outcomes of early life experiences on the health and developmental outcomes of individuals across the entire life span (Braveman & Barclay, 2009). We apply this model to the process of making decisions about treatment and service delivery for the developing child; the implication for treatment decision making is that clinicians need to consider the long-term effect on the child and family when making recommendations. We propose this model for care of children with ADHD; however, it may be applicable to most youth with emotional and behavioral problems as many of the issues that support our proposal are similarly relevant

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[1]We will use the word "children" throughout the chapter to refer to both children and adolescents.

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for all children. Although the life-course model is grounded in empirical evidence, we acknowledge that a substantial body of research is needed to fully test some of the articulated hypotheses. The goal of this chapter is to describe the model and its rationale as means of stimulating research designed to test the hypotheses within.

Current Status of Evidence-Based Practice for ADHD

The two treatments that have consistently been found to significantly reduce ADHD symptoms and improve functioning are psychotropic medication (Conners, 2002) and psychosocial behavior modification strategies (Fabiano et al., 2009). The behavior modification strategies that are effective in improving impairment associated with ADHD are behavioral parent training programs, classroom management strategies, daily report card systems that involve home-based reinforcement for school performance, academic intervention strategies, and organizational/study skills training (Fabiano et al.). Some children, particularly those with the most severe symptoms and impairment, may require the combination of stimulants and behavioral interventions to optimize outcomes (Barkley, 2006). Notably, conclusions about the efficacy of psychotropic and behavioral interventions for children with ADHD are based on studies assessing short-term benefits. In fact, studies that have examined long-term benefits of medication and psychosocial treatment have indicated that the benefits decrease over time (Jensen et al., 2007) and do not result in normalized levels of ADHD symptoms (Swanson et al., 2007) or minimized risk for substance use or delinquency (Molina et al., 2007). These findings highlight why it is problematic to base best practice models on evidence for short-term gains rather than long-term outcomes that help youth become independent and successful adults. Given the chronic nature of ADHD, this is a critical shortcoming in the literature.

Rationale for a Comprehensive Life-Course Model of Care

Based on the current state of the evidence, there are a few models of best practices that inform the care of children with ADHD. In some best practice models, such as the medical home model, the emphasis is on the provider-patient relationship and coordination of care (Sia, Tonniges, Osterhus, & Taba, 2004). Other models focus on specific services to be provided. For example, in the medical and mental health professions, there are two main sets of services that can be provided: medications and psychosocial interventions. Most best practice guidelines for ADHD recommend considering both, but some argue that care should begin with psychosocial interventions (Pelham & Fabiano, 2008), and others indicate that treatment typically should begin with medication (American Academy of Child and Adolescent Psychiatry [AACAP], 2007). In the education and public health literatures, best practice guidelines have borrowed from the Institute of Medicine (2001) prevention models and refer to service provision across three tiers including universal, indicated, and targeted prevention/intervention. Both the positive behavior support (Simonsen, Sugai, & Fairbanks, 2007) and the response to intervention (RTI; Burns, Deno, & Jimerson, 2007) literatures include this tiered model of care. This model indicates that all students should be exposed to best practices for preventing emotional, behavioral, and learning problems (tier 1). Those at high risk or displaying mild to moderate problems should receive low-intensity interventions (tier 2), and those for whom these interventions are inadequate should receive intensive interventions (tier 3).

Limitations of Current Models of Care

These models and guidelines have been developed primarily based on considerations of treatment efficacy and cost. For example, the debate between whether to begin treatment with medication or psychosocial interventions has been

historically based on questions of short-term efficacy (e.g., Pelham, 1999), and there are studies in the literature that can be used to support superior efficacy for either approach alone and for combined forms of treatment (e.g., Langberg et al., 2010; MTA Cooperative Group, 1999). A common finding across all studies is that there are large individual differences in response to all forms of treatment (e.g., Evans et al., 2001), and the decision about how to proceed with any individual child cannot be based on differences at the group level. Some interesting studies of outcomes based on various sequences and dosages of both types of treatment are under way (Pelham et al., 2008) and could inform a model of care especially if moderators that identify best approaches for individual children can be identified. Nevertheless, there is more that goes into a model of care than sequencing the interventions based on short-term potency. Other factors such as cost, minimum necessary dosage, delivery characteristics, and family beliefs and preferences also should be considered.

Unlike the medical and mental health models in which the issue of potency is often paramount, the three-tiered model endorsed by many in education and public health (Sugai & Horner, 2002) is an example of a framework that is not based solely on potency, but instead on cost in terms of time, finances, and other resources. For example, most tier 3 interventions would likely be effective for many of the same students who may adequately respond to a tier 2 intervention, yet the three-tiered model delays the more resource-intensive and expensive tier 3 interventions until a student has not adequately responded to a tier 2 intervention. All interventions are organized into three tiers with those with the greatest cost per child in tier 3, less cost per child in tier 2, and the least cost per child in tier 1. Students receive more costly interventions when they demonstrate that the services provided at their current tier are inadequate (Sugai & Horner).

In addition, the medical, psychosocial, and three-tiered models lack specificity. For example, the medical model provides little guidance for how to prioritize and sequence psychosocial interventions in schools, and similarly, descriptions of the three-tiered model rarely include any mention of medication. Parents and providers are left to make treatment decisions based on narrow models of care provision. Thus, there is a need for a model that adequately incorporates a wide range of evidence-based practices, as well as long-term child outcomes as prioritized in emerging life-course models (Forrest & Riley, 2004) that focus on how experiences and treatment decisions early in life have an effect on outcomes later in childhood and in adulthood. We believe that care for children with ADHD could be greatly enhanced when guided by a life-course perspective that prioritizes helping children develop into independent, healthy adults who are competent in coping outside of their parents' homes and who successfully pursue a vocation and recreation. Below, we provide two examples of how adopting this perspective affects clinical decisions in a manner that is meaningfully different than a perspective that prioritizes short-term efficacy or cost. Then we provide a detailed description of the model.

Example 1

Despite the short-term efficacy of both psychosocial interventions and medication, many professionals in the field of ADHD have concluded that stimulant medication generally is the most potent form of treatment for youth with ADHD (AACAP, 2007). Thus, a model of care that prioritizes short-term efficacy may indicate that medication should be the first form of treatment. In contrast, a model of care that prioritizes the ongoing acquisition of skills needed for competent, independent functioning later in life (i.e., life-course model) would indicate that a psychosocial and educational intervention approach should be carefully considered first before introducing medication treatment. In this case, the life-course perspective may lead to a different initial choice of care because providing medication as a first option may preclude children from investing in the acquisition of skills needed for competent, independent functioning. That is, medication, when used in isolation, may lead to children being dependent on taking medication for improvements in competencies. Examples of

the life-course approach to care are demonstrated with other medical problems such as obesity and high cholesterol. Namely, adjustments to diet and exercise are often recommended before medication regimens are implemented.

We acknowledge that a substantial percentage of children may need medication treatment because psychosocial interventions are not adequate for everyone. In addition, access to psychosocial services may be limited in some geographic areas, and in some cases medication may facilitate incremental benefits of behavioral intervention. However, for those who are able to access evidence-based psychosocial interventions and who respond well to these approaches, it may be possible for them to achieve a level of skill development and independent functioning that would not have been achieved if they received medication prior to or instead of psychosocial interventions.

Example 2

In the context of tiered models that prioritize minimization of costs, the most frequently used strategies to help children with ADHD succeed at school are accommodations.[2] Accommodations are required in IDEIA and are frequently part of tier 2 or 3 interventions, Section 504 Plans, and individualized education plans. The most commonly recommend strategies include providing longer time to complete tests, providing students with the teacher's notes from class, and reducing or eliminating the penalty for late assignments. In the case of a tiered model approach, educators may choose the strategy that is easiest for them to implement from among those that are recommended (e.g., see Pfiffner, Barkley, & DuPaul, 2006) with the rationale that reducing the academic and/or behavioral expectations demanded of children will help them perform on par with same-aged peers. In contrast, a model of care that prioritizes the acquisition of skills for independent life functioning would indicate that interventions that facilitate skill development should be carefully considered first before introducing a strategy that reduces expectations. Reducing expectations (e.g., extended time on tests, giving students class notes) first is inconsistent with a life-course model because such services fail to develop competencies that lead to independence. For example, providing longer time to complete tests reduces the development of skills needed for efficient task completion. Providing students with the teacher's notes from class eliminates the need to learn how to take notes. In contrast to these strategies, interventions that improve the ability of students to take notes in class (Evans, Pelham, & Grudberg, 1995), organize and manage assignments (Evans, Serpell, Schultz, & Pastor, 2007; Evans, Schultz, DeMars, & Davis, 2011; Langberg et al., 2011), and be prepared for class (Gureasko-Moore, DuPaul, & White, 2007) enhance competencies and should be recommended before reducing expectations. Although providing accommodations is less costly than implementing interventions and is consistent with current tiered models in the education system, in a system that seeks to optimize the long-term outcomes of the child, providing interventions to improve competencies is the first priority.

Description of the Comprehensive Life-Course Model of Care

The model has two parts. The first includes a set of four layers of services that have implications for the sequencing of providing evidence-based practices to children. The second includes principles of care that are a set of guidelines for providing services across all four layers of the model. The first part of the model including the layers is an application of life-course models

[2]We define accommodations as changes to practices in schools that hold the student to the same statewide standard but provide a differential boost to mitigate the impact of the disability on access ("level the playing field") to the general education curriculum. Interventions are changes made through a systematic process to develop or improve knowledge, skills, behaviors, cognitions, or emotions (Harrison, Bunford, Evans & Owens, 2012). Accommodations represent changes to the environment to help children with ADHD succeed, but do not necessarily develop student competencies; in contrast, interventions facilitate change in student competencies.

Table 1 Life-course model of care for ADHD

Life-course model part 1: services and sequencing			
Sequence	Layer	Goal	Possible treatment methods
1	Foundational strategies	Establish that appropriate behavior management is in place in the classroom and home; facilitate positive parent–child, teacher-student, family-school relationships	Consulting/training with teacher Group parent education Parent-teacher communication
2	Strategies to increase competencies and address functional impairments	Identify specific areas of impairment and improve functioning in these areas	Individualized parent training Daily report card (DRC) Academic interventions Organization interventions Social functioning interventions Self-management Homework management
3	Modified or supplemental interventions	Improve symptoms and response to interventions in layer 2	Medication
4	Accommodations, modified expectations, restrictions	Adapt environment to allow child to succeed	Reductions in expectations for behavior or academic performance at school Restrictive education placements Assistance in the home or changes to home setting

Life-course model part 2: principles for service delivery

1. Apply interventions with an understanding of *contextual and cultural factors*
2. Promote *engagement* of parents and youth
3. Tailor interventions to the child's *developmental level*
4. Tailor interventions to meet *individual child and family needs*
5. *Facilitate alliances* within and between systems
6. Include ongoing *practice supports* for those implementing interventions
7. Include *progress monitoring* to evaluate treatment response

evolving in medicine (e.g., Forrest & Riley, 2004) to mental health problems with children. The second part of the model is a synthesis of important aspects of care that have been described in many best practice guidelines and descriptions of competent care.

Part one of our model depicts a progression of layers of services that have implications for sequencing these services for children with ADHD (see Table 1). The layers have been sequenced to give priority to services that are likely to make the strongest contribution to long-term skill development and independent functioning. A description of the layers is followed by a description of how they can be used to guide clinical decisions.

Life-Course Model Part 1: Layers and Sequencing

Layer 1

There are two aspects to services at this initial layer. First, they include psychoeducational and foundational services that help parents and teachers develop, manage, and maintain environments that are supportive of healthy child development, caring, and safe for children. Second, this layer includes a brief assessment of home and school environments following the referral of a child. The first question that is addressed at this layer is to determine the extent to which either or both of these environments may be contributing to the presenting problems. If it is determined that the

school and home environments are not substantially contributing to the presenting problems of the child, then services at layer 2 should be considered. If these contexts are chaotic or otherwise nonsupportive and may be contributing substantially to the problems for which the child has been referred, then services should be provided at this first layer. The goal of services at layer 1 is not to help teachers or parents implement techniques to address the specific needs of the referred child (these are layer 2 services), but simply to help them establish a supportive, caring, and safe environment for all students/children, thus reducing the contextual contributions to the problems that led to the referral of the child. In addition, by stabilizing the home and school environment, teachers and parents may be better able to provide the interventions and monitoring that are often necessary at subsequent layers of the model. For example, addressing basic sleep and nutritional needs is an example of a layer 1 strategy that may reduce problematic child behaviors and thus the need for layer 2 (more targeted) interventions. Moving a child from a chaotic foster placement to one that is supportive and safe is another example of a layer 1 intervention. In addition, helping a teacher implement general classroom rules and routines to manage the behavior of students, improve instruction, and enhance learning of all students is another example of a layer 1 intervention. Depending on the severity of the problems in the home or school, these interventions could be substantial and intense, but a necessary first step. There may also be situations in which the home and/or school environment are problematic, but there is little likelihood that they can be improved. In these situations, moving to layer 2 is appropriate with the additional recommendation that interventions targeting the child's ability to cope with a chaotic or unhealthy environment are part of the layer 2 services provided.

Layer 2

Interventions in layer 2 are intended to facilitate learning or increase the competencies of the targeted youth. Specific behavior management techniques such as the daily report card (Kelley, 1990) are appropriate at this layer because they are intended to teach the child appropriate classroom behavior. These techniques may involve equipping parents and teachers with the skills needed to enhance the competencies of students. Teaching students to take notes in class (Evans et al., 1995), prepare class materials (Gureasko-Moore et al., 2007), organize materials and tasks (Evans et al., 2009), or resolve problems within their family (Barkley, Edwards, Laneri, Fletcher, & Metevia, 2001) are interventions that are intended to increase the competencies of intervention recipients. In addition, services such as family therapy, individualized parent training, and home- and school-based behavioral interventions are also part of layer 2, if they lead to increased child competencies. There may be multiple layer 2 interventions provided at the same time and each may vary in intensity. Decisions about which interventions to provide should be based on behavioral assessment and measures of response to interventions.

Layer 3

This layer of services is focused on medication treatment. Pharmacotherapy is generally appropriate when the attempts to increase the competencies of the child or adolescent with psychosocial interventions are inadequate. In these cases, medication may be a necessary *addition* to the treatment program. However, in some cases, a combined approach to care (layers 1, 2, and 3) may be justifiable at the outset. Indeed, there is evidence for maximum benefit for some children when both psychosocial and medication treatments are combined (The TADS Team, 2004; MTA Cooperative Group, 1999; Vitiello et al., 2006; Walkup et al., 2008) and that combined forms of treatment may result in approaches to intervention that are more sustainable than separate treatments (Fabiano et al., 2007). For example, a low dose of a behavioral intervention in layer 2 coupled with a low dose of medication may be more sustainable for some families than a high dose or intensity of behavioral intervention in layer 2. We acknowledge that school-employed personnel may not directly recommend medications; however, a comprehensive model of care must

address services that are provided by all child-serving systems (e.g., education, medicine, mental health).

Layer 4

The final layer of services involves modifying the expectations for children to perform at a level similar to same-aged peers. This involves reducing expectations in a manner that has typically been referred to as accommodations. If the goal of services is to help youth with ADHD achieve independent functioning at a level commensurate with their peers, then implementing accommodations at layer 4 is essentially an indication that this goal cannot be achieved. For example, we would not give a person paralyzed from the waist down a wheelchair and build a ramp to the front door of their house if the injury can be surgically repaired. The first priority would be improving the competency of the person to walk (in this case, via surgical intervention). If independent walking is not achievable, *then* appropriate accommodations would be provided. There is an exception to the use of accommodations as a last resort. If the paralyzed person would take many months of recovery and rehabilitation before being able to walk, the wheelchair and ramp may be used temporarily to allow travel while the recovery occurs. Similarly, if a student with ADHD is being taught to take notes in class to improve on-task behavior and comprehension, the teacher may provide notes while the student is learning the skills that will allow him to independently take notes in the future. In such cases, accommodations (layer 4) are implemented simultaneously with the interventions (layer 2 and possibly layer 3) such that performance is gradually shaped toward a terminal goal (e.g., independent note taking). In other words, accommodations may be used as a temporary supplement to interventions, during the time in which the student has not yet mastered the skill or competency. Thus, if school-employed personnel feel compelled by state or federal law to implement accommodations, they should first be used in conjunction with layer 2 (and possibly layer 3) interventions rather than being used in isolation.

Application of Layers

Services within the layers may vary in degree of intensity. That is, layer 1 services could be implemented with high intensity in the absence of implementation of services from any other level. Alternatively, less intensive services from all layers could be implemented simultaneously. In addition, there is no clear delineation of universal, targeted, or selected services, although universal services would fall under the layer 1 and targeted or selected services would most align with services under layers 2, 3, and 4. In general, services for a child begin at layer 1 and move to layer 2 if the services in layer 1 do not result in an adequate response. Services provided at lower layers *do not end* when initiating services at a higher layer. Thus, progression through the layers may lead to a cumulative set of services. Depending on the severity of the child's symptoms and impairments, and the situation, it is possible that services at all layers may be warranted without progressing sequentially through the layers. At a minimum, lower layers should be considered prior to implementing higher layers, but children, parents, and education, mental health and medical professionals might make a case for providing services at a higher layer early in the process (e.g., introducing medication in the early stages). Finally, all of the layers of services should be provided in a manner consistent with the principles for service delivery described in part 2 of the model.

Life-Course Model Part 2: Principles for Service Delivery

The layers of this model offer a guideline for sequencing the implementation of services that facilitate the development of competencies, with an emphasis on methods that have substantial empirical support. Although evidence-based services are a *necessary* component of a comprehensive life-course model of care, we argue that the use of such services is not *sufficient* to achieve maximal long-term child outcomes. Thus, the second part of the model includes a set of principles (see Table 1) that should be applied when

implementing the services described in part 1. The principles represent a synthesis of theoretical and empirical work within the field of ADHD, as well as from other areas of psychology, education, and medicine. Further, many of these principles are informed by limitations in current practice and research, including (a) failure to account for *cultural and contextual factors* in treatment for ADHD (Graczyk et al., 2005), (b) limited success in *engaging underserved families* in treatment (McKay, McCadam, & Gonzales, 1996), (c) failure to tailor treatment to the child's *developmental level* (Fabiano et al., 2009; Wolraich et al., 2005), (d) failure to tailor treatment to the *individualized needs* of the child and family (DuPaul, Eckert, & McGoey, 1997), (e) limited use of *progress monitoring tools* to make intervention decisions (Owens et al., 2012), (f) poor *coordination among systems* of care (Guevara et al., 2005; Power, Mautone, Manz, Frye, & Blum, 2008), (g) failure to promote intervention integrity through *practice supports* (Sanetti & Kratochwill, 2009), and (h) limited research in naturalistic settings that could offer empirical evidence to inform many of the above issues (Owens & Fabiano, 2011). Each of these principles is reviewed below.

Culture and Context

Culture refers to shared values, beliefs, norms, learned ways of thinking and behaving, knowledge and skill bases, and expectations for behavior that are shared among a group of people (U.S. Department of Health and Human Services, 2001). If services are not applied with sensitivity to the family's context or culture, clients are likely to terminate services prematurely or to remain in treatment with little uptake of the intervention. Thus, a family- or patient-centered approach to care involves respecting the family's values and beliefs and offers care in a language suitable to the family (Institute of Medicine, 2001). Awareness and sensitivity to cultural beliefs and customs are important for layer 1 services as clinicians are assessing the family setting to determine the extent to which it is supportive, caring, and safe. Furthermore, families of various cultural backgrounds have unique conceptualizations of the symptoms of a disorder, as well as the severity of various behaviors (Pescosolido et al., 2008), suggesting that it is important to understand how a family was referred for services, the degree to which they perceive the child's behaviors as a problem, and the extent to which they feel comfortable expressing disagreement with professionals. Similarly, at layers 2 and 3, it is important to consider parent preferences among interventions (Cunningham, Buchanan, & Deal, 2003), a parent's readiness for change and stress level (Cunningham et al., 2008), and parents' concerns about the potential adverse side effects of a given treatment (Acria, Fernandez, & Jaquez, 2004). Further, once parent preferences are considered and the preferred treatment is selected, it is important to consider how that treatment may need to be adapted. It is important to maintain the empirically supported mechanisms of change while potentially modifying their delivery to adjust for cultural issues. For example, some have suggested that racial socialization issues should be incorporated into early parenting discussions with some African American families (Coard, Wallace, Stevenson, & Brotman, 2004); however, it is important for clinicians to remember that beliefs and values are not consistent within races, genders, or economic classes and need to be assessed for each family instead of assumed.

Intervention Engagement

Engagement is a multidimensional construct that is related to exposure or amount of intervention received, responsiveness during treatment sessions, and adherence to recommended procedures (Sanetti & Kratochwill, 2009). With treatment for ADHD, it is important to acknowledge the engagement of the many participants involved including youth, parents, teachers, and other school professionals. Although the relationship may be complex, research suggests that engagement (via session attendance) is related to treatment effectiveness (e.g., August, Realmuto, Hektner, & Bloomquist, 2001) and that responsiveness during treatment sessions is associated with positive outcomes (Nix, Bierman, McMahon & The Conduct Problems Prevention Research Group, 2009).

Families vary greatly with regard to their engagement in intervention. Socioeconomic disadvantage, single-parent status, young maternal age, parental depression, and low social support are factors that place families at risk for low layers of treatment initiation and engagement (Reyno & McGrath, 2006). Strategies have been developed to promote treatment initiation at layer 1 and sustained engagement during layers 2, 3, and 4, including persistent phone contact, home visiting, motivational interviewing, and problem solving to overcome barriers to care (McKay & Bannon, 2004; Nock & Kazdin, 2005).

Developmental Level

At each stage of development, children face new challenges and have unique needs and goals for healthy social, emotional, and academic development. This necessitates treatment approaches that are tailored to the child's developmental level. Although the majority of research on treatments for ADHD has been conducted with elementary-aged students (Fabiano et al., 2009), there is emerging research that demonstrates how treatment methods can be tailored to the needs of preschool, elementary, middle, and high school youth (for reviews, see DuPaul & Kern, 2011; Wagner & McNeil, 2008; and Wolraich et al., 2005). For example, psychoeducation in layer 1 and parenting interventions in layer 2 that are most appropriate for preschool-aged children focus on establishing (a) positive parent–child relationships via child-directed play, encouragement of exploration, praise for appropriate behavior, and healthy communication of emotion, and (b) clear expectations for appropriate behavior via guidance and feedback when behavior does not meet expectations, mild and prudent consequences when limits are broken, and modeling of healthy self-regulation skills. In contrast, parenting strategies and interventions for adolescents focus on parent-adolescent communication and problem solving that balances parental monitoring with adolescent autonomy (e.g., Barkley et al., 2001). Similarly, school-based interventions can be tailored to the child's developmental level with regard to intervention complexity (less complex for young children), the frequency of reinforcements (more frequent for young children), and the target of the intervention (e.g., basic rule following or literacy skills for young children; academic productivity and organizational skills for older children; e.g., Evans et al., 2009; Verduin, Abikoff & Kurtz, 2008).

Individualized Approach

There is substantial evidence that one size does not fit all in the treatment of ADHD. As a rule, response to intervention is highly variable and current knowledge about predictors of treatment response is limited. Nonetheless, research has identified several potential moderators of intervention response: Presence of comorbid anxiety is indicative of a favorable response to behavioral treatment, high severity of ADHD symptoms and impairment are associated with poor response to pharmacological and combined treatments, and African American families appear to respond more favorably to combined treatment than White families (Hinshaw, 2007). Further, the quality of relationships in a child's life (e.g., parent–child, student-teacher) has a substantial influence on functioning at home and school (Pianta, 1999).

In addition to considering the role of possible moderators of treatment response, it is also important to assess the functions of behavior. Applied behavior analysis (ABA) has contributed greatly to our understanding of how to tailor interventions to fit the circumstances of each individual. The function of behavior in a particular situation varies substantially across individuals and contexts (e.g., obtain adult or peer attention, escape demands, obtain tangible rewards). Further, the set of antecedent events and consequences that maintain behavior over time are unique to individuals and contexts. Designing an intervention plan in layer 2 that is likely to be successful requires an understanding of potential functions of behavior and an analysis of antecedents and consequences that may be maintaining the individual's behavior (DuPaul & Ervin, 1996). The implication of research on moderators to response and the functions of target behaviors demonstrate the importance of tailoring interventions to address the unique needs of children and their families (Power, DuPaul, Shapiro, & Kazak, 2003).

Alliances Across Systems

A major problem with service delivery for children with ADHD is the fragmentation of systems of care (Guevara et al., 2005). Connections across systems of care and between parents and providers are vitally important for the successful development of children at home, school, and in the community. Thus, the development of a strong partnership between parents and teachers during layer 1 services facilitates the exchange of valuable information about the child and creates a context for collaborative problem solving to resolve academic and social concerns when they arise (Sheridan & Kratochwill, 2008). Several interventions in layer 2 and layer 3 require home-school communication and collaboration. For example, in a daily report card (DRC) intervention, teachers document the child's progress toward individualized goals during the school day, and parents provide a home-based reward contingent upon school behavior. Similarly, teachers may communicate with parents about possible medication side effects that might influence treatment decision making at the next medical appointment. Establishing means of daily communication between home and school provides a mechanism for problem-solving challenges as soon as they arise.

A strong alliance between parents and the primary care provider is also important for children with ADHD, especially when medication (layer 3) is being considered. The medical home model in primary care (Toomey, Finkelstein, & Kuhlthau, 2008) and models of practice that integrate behavioral health services in the context of primary care are being explored to address the needs of children with ADHD and other conditions (Kelleher, Campo, & Gardner, 2006). Unfortunately, although primary care providers and school professionals are the major providers of services for children with ADHD, collaboration between them is often nonexistent (Power et al., 2008). A fundamental principle of our approach is that key stakeholders from multiple systems (family, school, primary care practice, mental health center) need to be involved in collaborative management throughout the intervention process to maximize outcomes.

Practice Supports

As described above, evidence-based practices for ADHD require engagement (session attendance and participation) and adherence to recommended intervention strategies by parents and teachers. If parents and teachers are not engaged in intervention and/or the intervention is not implemented with sufficient quality, the impact of the program is reduced (e.g., Dishion, Patterson, & Kavanagh, 1992; Hinshaw et al., 2000; Pfiffner, O'Leary, Rosen, & Sanderson, 1985). Poor engagement and implementation rates are problematic in home- and school-based interventions (e.g., Fabiano et al., 2010; Owens, Murphy, Richerson, Girio, & Himawan, 2008). The findings of these studies suggest that in the absence of ongoing practice supports for parents and teachers, a large proportion of children will not respond to intervention partly due to poor adult engagement and integrity. Although significant research is still needed to inform strategies to overcome this challenge, there is evidence that intervention integrity can be improved by providing ongoing consultation with performance feedback (Codding, Feinberg, Dunn, & Pace, 2005; Noell, Witt, Gilbertson, Ranier, & Freeland, 1997) for teachers who are implementing a layer 2 classroom intervention. Similarly, there is some evidence that teaching parenting strategies in the context of real-time coaching (rather than via didactic teaching) yields improvements in parent adherence to new parenting practices (Eyberg & Matarazzo, 1990). Thus, practice supports may facilitate parent and teacher engagement and implementation, as well as a child's response to intervention. Indeed, if a child is demonstrating a less than desirable response to an intervention, it is important to assess parent and teacher implementation integrity and ensure quality in this area before considering a more intensive intervention, as a more intensive intervention may not produce more positive outcomes if the additional services rely on the same parents and teachers.

Progress Monitoring

The life-course model of care includes the principles of an RTI framework. In an RTI framework, progress monitoring provides data that

indicate whether a child is responding to the intervention and can inform whether modifications to current intervention are needed or whether an alternative or additional intervention is needed. Many layer 2 interventions (e.g., DRC, organizational checklist, homework management checklist) include tracking sheets that provide daily data about the child's progress. These data can be graphed to depict the child's response to the intervention over a given period of time. It is important for providers, parents, and teachers to have realistic expectations for response to intervention. Namely, evidence suggests that it can take between 2 and 4 months of consistent classroom implementation before behaviors are nearing the normative range (e.g., Evans et al., 2009; Owens et al., 2008). Similarly, if a medication trial (layer 3) is conducted in the context of an ongoing layer 2 psychosocial intervention, the daily data from the child's layer 2 intervention can be used to determine if the child is demonstrating an incremental benefit of the medication. Likewise, if a child is not responding to a layer 2 or layer 3 intervention (e.g., academic productivity remains low, or acts of aggression continue), the behavior that was monitored during the layer 2 and 3 interventions (e.g., productivity or aggression) should continue to be monitored as the layer 4 accommodation is implemented to determine if the selected layer 4 accommodation mitigates the impact of the problem on the behavior of interest.

Summary and Future Directions

In this chapter, we have articulated the services, sequencing, and principles associated with a comprehensive, life-course model of care for children with ADHD. There are many practical issues related to implementation that are not described in this chapter due to space limitations. Many of these are currently being developed and revised within the context of both clinical and research settings and will be described in future publications. The purpose of this chapter was to orient the reader to the life-course model and the rationale. Our foundation belief for this model is that intervention planning should prioritize services that will help children and adolescents gain competencies and skills that will facilitate independent functioning during their youth and as an adult. The components of the model (services and principles) represent a synthesis of theoretical and empirical work based on the treatment literature pertaining to ADHD, as well as from other areas of psychology, education, public health, and medicine. Based on this literature, we have proposed a sequencing of treatments that we believe will maximize long-term benefit. We have articulated that evidence-based practices are a necessary, but not sufficient, component of a comprehensive model of care. In order to achieve maximal long-term child outcomes, evidence-based practices must be delivered in a culturally competent and engaging manner. Services must be tailored to the child's developmental level and unique areas of impairment. Once treatments have been initiated, professionals must take responsibility for coordinating care within and between systems, establishing meaningful progress monitoring systems that guide treatment decision making, and providing practice supports that enhance treatment adherence and sustainability. Although the life-course model is grounded in empirical evidence, a substantial body of research is needed to fully test some of the articulated hypotheses. Our hope is that the description of this model and its justification will stimulate discussion and critical lines of research related to layers and principles of service delivery.

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Classroom Interventions for Youth with Pervasive Developmental Disorders/Autism Spectrum Disorders

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Introduction

A large literature has amassed over the past three decades describing numerous advances in evidence-based practices (EBP) for those diagnosed with autism spectrum disorder (see for reviews Iovannone, Dunlap, Huber, & Kincaid, 2003; National Autism Center, 2009; National Research Council, 2001; Rogers & Vismara, 2008; Sturmey & Fitzer, 2007). Many of these practices are components of the classroom- and center-based programs described below. These practices, alone or in combination with other practices, were designed to remedy the qualitative impairments in social interaction and communication and reduce restrictive, repetitive, or stereotypic behaviors that characterize the autism spectrum disorder (ASD).

Classroom- and center-based programs (i.e., comprehensive interventions) for students diagnosed with ASD are characteristically derived from two theoretical orientations: behavioral and developmental. Behavioral and developmental approaches differ philosophically and pragmatically, and there are ardent supporters and critics of each. Those from a behavioral orientation are informed by a significant research base whose foundations begin in the field of applied behavior analysis (ABA) and have shared assumptions about why people behave the way they do including (1) that most nonreflexive behavior is learned through interactions between the individual and the environment, (2) that there are lawful principles of behavior that describe the conditions under which behaviors are acquired and maintained, and (3) that the demonstration of novel or new behaviors (i.e., behaviors which were not directly taught) can be explained by behavioral processes such as adduction (emergent novel behavior resulting from transitive emergent relations derived from learning distinct and unrelated behaviors) and generalization (the spread of reinforced learning to novel situations; Catania, 2006). In practice, behavioral approaches focus on the direct instruction of small units of behavior until fluency and mastery are obtained. Small units of behavior may be chained together to develop complex behavioral repertoires. Once mastered, the skills and complex repertoires are generalized to new situations and settings, called "programming for generalization" (Stokes & Baer, 1977).

Developmental approaches were originally derived from Piaget's (1966) theory of cognitive development. In Piaget's model, individuals move through four stages of cognitive development

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(sensory-motor, preoperational, concrete operational, and formal operational). Through these stages, thought moves from the concrete to the conceptual, from simple to complex, and from egocentric (focused on the self) to increased focus on ideas and others. Developmental models were also informed from the Mahler, Pine, and Bergman (1975) formulation of interpersonal growth through the attachment-separation-individuation process. Mahler et al. (1975) state from the beginning of the first stage, around 4–6 months to 36 months and into adulthood, a child moves from attachment to mother, to a stage of separation from mother, and finally to the individuation stage where child is different from mother, but still connected. Researchers and practitioners who apply the developmental programs described below view cognitive and emotional growth through a Piagetian/Mahler lens and use play-based interactions to develop affective relationships that guide the child through these difficult stages. According to the developmental framework, the mind acts independently from the environment as it develops from infancy through toddler years, into adolescence, and adult life. Perhaps the most distinguishing feature of a developmental philosophy and approach (compared to behavioral approaches) is that the "mind" is an independent agent that organizes and reorganizes information as part of an inherent process and need not be influenced by specific environmental arrangements (i.e., be directly taught) in order to develop complex thought and emotion.

There has been some debate over the comparative efficacy of interventions derived from the developmental and behavioral approaches. However, as the emphasis on intervention value shifts from ideology to effectiveness, EBPs that capitalize on the strengths of both behavioral and developmental approaches are becoming more common. This chapter will illustrate exemplar programs from behavioral and developmental classroom programs for school-aged children with ASD according to the support found and, when possible, in a logical sequence whereby the limitations of one program are accounted for in the strengths of the next. Within each program narrative is a cursory description of the intervention, the philosophical premise, and the empirical support demonstrating the intervention's efficacy for students with ASD. The programs represented in this chapter are not an exhaustive list of the behavioral and developmental approaches available in school- and center-based settings, but are illustrative of their respective approaches.

Classroom Programs for Students with Autism Spectrum Disorder

Discrete Trial Training

Discrete trial training (DTT) is perhaps the most widely recognized ABA technique for children with autism and has repeated empirical demonstrations (McEachin, Smith, & Lovaas, 1993; Smith, Groen, & Wynn, 2000). DTT is an intensive instructional approach involving sessions which are paced and initiated by the instructor using specific cues and prompting strategies (Delprato, 2001). Teaching sessions are typically conducted in a one-to-one format (teacher to student) in an uncluttered setting. Instruction generally involves the repeated practice of the same skill and the delivery of external reinforcers to increase skill acquisition. Instruction within DTT involves breaking down complex skills into small component parts and teaching each component part individually. For example, in order to teach a student with autism to play appropriately with toys, an instructor may first teach them to imitate actions with objects, such as pushing a car when provided with an imitative cue. This method of breaking down complex skills into smaller instructional targets, coupled with repeated practice, is highly effective for teaching individuals with autism new behavioral repertoires and complex discriminations (Ghezzi, 2007).

The early demonstrations of DTT illustrated significant behavioral and cognitive changes in children with autism (Lovaas, Berberich, Perloff, & Schaeffer, 1966; Lovaas & Simmons, 1969). The study cited most often (Lovaas, 1987) was a group design, in which the DTT group made significant cognitive and behavioral gains compared to their control-group counterparts. In that study, however, 19 of the 59 total participants were exposed to intensive DTT, whereas the other 40 students were exposed to less intensive interven-

tions. The results of this study also showed that 47 % of the 19 students who received intensive DTT achieved normal functioning, compared to 2 % of the 40 who received the less intensive DTT. Lovaas (1987) defined normal functioning for the purposes of this study as those students who had successfully completed first grade within a regular education classroom and had obtained an IQ score within the average range. The results of this study have been widely publicized and are often used as evidence that DTT can facilitate "recovery" (loss of diagnosis) from autism (Green, 1996; Smith, 1996). Several subsequent studies conducted partial replications of the original Lovaas (1987) study (Birnbrauer & Leach, 1993; Sheinkopf & Siegal, 1998). All of these replications showed substantial increases in nonverbal IQ (22–29 points) as a result of the DTT behavioral intervention.

Given its strong empirical support, several comprehensive curricula have been developed for the use of DTT in classrooms. These include *Teaching Developmentally Disabled Children: The ME Book* (Lovaas, 1981), *Teaching Individuals with Developmental Delays: Basic Intervention Techniques* (Lovaas, 2003), *Behavioral Interventions for Autism* (Maurice, Green, & Luce, 1996), and *A Work in Progress* (Leaf & McEachin, 1999). DTT can be used with students of varying ages, from early childhood to adolescence to teach skills across a range of content areas, and has been successfully used with students of varying levels of cognitive ability.

Although DTT has been proven to be effective in teaching a variety of skills to individuals with autism, several limitations have been identified. Researchers have described numerous disadvantages of DTT including limited generalization of new skills to new environments, a lack of spontaneous responding, prompt dependency, robotic or stereotyped responding, and the presence of escape and avoidance behaviors said to be caused by the "nonfunctional" and teacher-directed nature of the training (Schreibman & Anderson, 2001; Sundberg & Partington, 1998). In an attempt to overcome some of the weaknesses of DTT, some researchers advocate for the use of naturalistic approaches that are similar to, or informed by, the developmental literature.

Naturalistic Teaching

Naturalistic teaching approaches typically consist of loosely structured sessions which are initiated and paced by the child, take place in a variety of locations, and employ a variety of stimuli. This is in direct contrast to the DTT procedures which are conducted in highly structured, preplanned sessions that are initiated and paced by the teacher (Cowan & Allen, 2007). When properly conducted, naturalistic teaching may not appear as systematic to the casual observer. However, more expert analyses reveal systematic applications of behavioral procedures inherent in these methodologies including stimulus control, the systematic delivery of reinforcers, and the use of motivational techniques (Delprato, 2001). Naturalistic strategies address the limitations of traditional DTT by incorporating several behavioral techniques that are known to be beneficial for children with autism. For example, Ingersoll and Schreibman (2006) used a multiple baseline design across five young children with autism to evaluate the use of a naturalistic behavioral approach to teach object imitation skills. By using the students' motivation to access preferred toys, the researchers were able to teach the students to play with the toys in novel ways (pretend play) and increased social and communicative behavior by requiring the students to request the items and respond to questions about the play. All five participants showed increases in imitation skills and generalized these skills to novel environments. Participants also demonstrated increases in other social-communicative behaviors not directly targeted by the intervention including language skills and joint attention skills. These techniques are directly related to the learning characteristics of children with autism and include increasing motivation, the use of direct reinforcers, frequent variation of tasks and stimulus materials, the reinforcement of attempts, and the use of multiple examples (Koegel, O'Dell, & Koegel, 1987). Advantages of naturalistic teaching procedures include the use of the student's interests to guide instruction, reduced need for elaborate generalization procedures, reduced need for aversive control, and training conditions that appear

similar to early childhood classrooms (Sundberg & Partington, 1998).

Several naturalistic training techniques have been found to be effective for students with autism. These include incidental teaching (Hart & Risley, 1968), pivotal response training (Koegel et al., 1987), mand-model (Rogers-Warren & Warren, 1980), time delay (Halle, Marshall, & Spradlin, 1979), milieu teaching (Alpert & Kaiser, 1992), and interrupted behavior chains (Hunt & Goetz, 1988). Like DTT, these approaches are used to teach a variety of skills including social, communication, and language skills for students with autism at varying levels of ability.

Limitations of these approaches include the lack of a publically available curriculum and a standardized pre-intervention assessment process that is normed with a typically developing population and places the students within an educational scope and sequence of age and developmentally appropriate educational material. The lack of a manualized curriculum, with a prescribed scope and sequence and placement assessment, makes this approach much more dependent on highly specialized instructors and thus less likely to be widely disseminated in public school settings and center-based programs where the costs of ongoing professional development and consultation exceed the financial resources of the agency.

Strategies for Teaching Based on Autism Research (STAR)

The Strategies for Teaching Based on Autism Research (STAR) program is a behavioral program that includes a play-based instructional method (Arick et al., 2003). The three methods of instruction are DTT, pivotal response training (PRT), and teaching through functional routines (FR). In addition to the three instructional methods, STAR includes Positive Behavioral Intervention and Support (PBIS) strategies for managing the learning environment.

The STAR curriculum is divided into six major areas: expressive language, receptive language, spontaneous language, functional routines, pre-academic concepts, and play and social interaction skills (Arick, Loos, Falco, & Krug, 2004). The program has three levels of instruction to meet the needs of children, ages 2–8 years old, at different developmental stages. Students are placed in one of the three levels by following an initial assessment called the Student Learning Profile. Following placement, lesson plans guide the instructor through the scope and sequence of each new skill. Detailed lesson plans, instructional materials, toys and data collection forms for monitoring student progress in DTT, pivotal response training, and functional routines are included in the STAR kits.

Preliminary research regarding the efficacy of the STAR program shows promising results. Arick et al. (2003) described how teachers throughout the state of Oregon implemented the STAR curriculum and monitored the progress of 67 young students with autism. The study showed that significant progress in social interaction, expressive speech, and use of language concepts was observed in the majority of students receiving instruction based on the STAR program. On average, 40 % of the students in the study gained more than one month of language age for each calendar month, with most other students making smaller but significant gains. In addition, the students' functional communication and social skills improved, and decreases in behaviors associated with ASD were observed (Arick et al.). Although these results are promising, this study did not include a control group or rigorous design. There is one known randomized controlled trial (Mandell, Stahmer, Shinn, & Marcus, 2013), the results of which have not been published.

The STAR program has its limitations too. For example, the SLP is considered limited compared to other pre-intervention and progress monitoring assessments (e.g., the Verbal Behavior Milestones Assessment and Placement Program and the Assessment of Basic Language and Learning Skills). Additionally, the DTT, PRT, and data collection procedures are considered rigid and antiquated. These limitations reflect an effort to manualize and disseminate complex instructional techniques and data collection procedures for widespread use in special education classrooms.

Verbal Behavior Approach (VB)

The Verbal Behavior Approach (VB; Sundberg & Partington, 1998), though an ABA approach, differs significantly from other behavioral programs, such as DTT and the Competent Learner Model (Tucci, Hursh, Laitinen, & Lambe, 2005; *see below*). The VB approach which includes assessments, instructional sequences, and basic instructional methodologies is based on Skinner's analysis of verbal behavior (1957), in which he operationally defined and classified language based on its function. That is, Skinner defined language as learned behavior under the control of environmental variables and further stated that the meaning of any given word is based on its immediate function. Skinner's analysis of verbal behavior was viewed as controversial (e.g., Chomsky, 1959) and largely ignored until researchers at Western Michigan University began applying the concepts from Skinner's *Verbal Behavior* (1957) to the instruction for individuals with autism and developmental disabilities in the 1970s (Barbera & Rasmussen, 2007).

The VB approach is used in conjunction with one of two assessments and curriculum guides, the Assessment of Basic Language and Learning Skills-Revised (ABLLS-R) (Partington, 2006) or the Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP) (Sundberg, 2008). The VB approach incorporates the use of both DTT and naturalistic instruction, called Natural Environment Training, to guide instructional delivery. In both instructional formats, the focus of training is on the elementary verbal operants identified by Skinner (1957) as the foundation for more advanced language instruction (Sundberg & Michael, 2001). In addition to the use of Skinner's theory as a curricular guide, key features of the VB approach include the use of sign language for nonvocal students, capturing and contriving motivation to enhance instruction, frequent variation of instructional targets, and the use of errorless prompting strategies (Sundberg & Partington, 1998). The VB approach gained widespread popularity among parents and professionals near the turn of the century (Barbera & Rasmussen, 2007) with the publication of *Teaching Language to Children with Autism or Other Disabilities* (Sundberg & Partington, 1998).

Although the VB approach comprises research-based teaching methodologies, such as DTT and naturalistic instruction, there are no known randomized controlled trials or group studies of VB for the efficacy of the assessment protocols and curricular packages used within this approach. Therefore, further research evaluating this approach is needed. Finally, like other behavioral approaches, critics contend that the focus on small units of behavior, absent context, and a holistic understanding of the child impedes the developmental progress.

Competent Learner Model (CLM)

The Competent Learner Model (CLM; Tucci et al., 2005) is an approach that combines strategies of applied behavior analysis, direct instruction, and precision teaching. In contrast to other behavioral approaches, CLM focuses instruction on the development of broad repertoires called "competent learner repertoires" rather than isolated skills (Tucci, Hursh, & Laitinen, 2004, p. 110). The classroom intervention consists of five key components: (1) a course of study for educators and parents; (2) coaching for educators and parents; (3) a systematic curriculum for students; (4) performance assessments for educators, parents, and students; and (5) collaborative consultations (Tucci et al., 2004).

The course of study ensures that parents and educators master the required teaching strategies used in the students' curriculum. Educator training is accomplished through web-based and didactic instruction, with frequent on-site performance checks by trained and certified CLM coaches. The students' curriculum was specifically designed to teach and strengthen seven "competent learner repertoires" (observer, listener, talker, reader, writer, problem solver, and participator). The competent learner repertoires are targeted for instruction using a prescribed curricular sequence which can be taught using one or more of the four instructional arrangements (teacher-directed, semi-directed, peer-directed,

and nondirected). Performance assessments are used to identify students' strengths and weaknesses in the seven competent learner repertoires as well as provide a curricular guide to track progress through the curriculum. Finally, program fidelity is the responsibility of the classroom staff. For example, all classroom staff perform frequent fidelity checks with each other (e.g., teacher to aide and aide to teacher) to ensure that instructional component fidelity is maintained.

The creators of CLM purport several novel benefits of this intervention compared to most others. For example, the authors suggest that the focus on the seven learner repertoires enables students to benefit from more typical instructional procedures, presentations, groupings, and formats, thus allowing students to learn from novel arrangements in novel situations much like typically developing children (Tucci et al., 2005). Additionally, the developers included professional development and ongoing coaching within the curriculum rather than as a stand-alone, onetime training which is so often the case when adopting a new curriculum in educational settings.

There are no known studies that have empirically evaluated the use of CLM or compared CLM to other approaches. The program developers (Tucci et al., 2005) state it is evidence based because it is comprised of the behavioral practices found in the reviews listed above. Additionally, the staff training component is intensive and ongoing, and though the authors suggest this emphasis on program fidelity is important, it may prevent the widespread adoption in financially constrained school districts and centers.

Treatment and Education of Autistic and Related Communication-Handicapped Children (TEACCH)

The TEACCH approach to the education of individuals with autism was founded in the 1970s at the University of North Carolina at Chapel Hill. TEACCH developed the concept of the "culture of autism" as a way of thinking about the characteristic patterns of thinking and behavior seen in individuals with ASD (Mesibov, 1994). The culture of autism includes items such as strength in visual processing, attention to details, difficulty with communication, and the tendency to become attached to routines (Mesibov, Shea, & Shopler, 2005). Understanding and respecting the culture of autism are fundamental principles that guide service delivery within a TEACCH classroom. As such, the model focuses on integrating these characteristic patterns of thinking and behaving to emphasize building on individual strengths rather than remediating deficits. Implementers of the TEACCH model work on skill development in classroom settings using behavioral techniques with a person-centered philosophy. Long-term goals are the fulfillment of fundamental human needs such as a sense of dignity, productive and personally meaningful activities, and feelings of security, self-efficacy, and self-confidence.

The TEACCH intervention itself is called "Structured TEACCHing" (Mesibov et al., 2005). Structured Teaching begins with the development of an individualized education plan for each student and does not include a specific curriculum. Classroom arrangements include visual supports to sequence daily activities, add predictability, and to make individual tasks understandable and easy to follow (University of North Carolina School of Medicine, 2011).

Classrooms based on the TEACCH model are designed with several key features largely related to the organization and structuring of the physical environment and daily routines. The physical environment is designed to be clearly organized and structured to promote independence within the daily routine. Clear boundaries between areas within the classroom are created using systematic placement of furniture and visual cues. Additionally, visual schedules and a predictable sequence of events are fundamental aspects of the approach and are said to promote independence and reduce frustration. Daily classroom routines are designed to promote flexibility by introducing change systematically and within a structured environment. Independent work stations are prepared for each student in a TEACCH classroom and include a visually organized sequence of tasks to be completed during independent seatwork instruction. This instructional

component is integral to TEACCH classrooms and is intended to promote independence (Mesibov et al., 2005). TEACCH is used with individuals of all ages and across a wide range of intellectual functioning. TEACCH has been used successfully in a variety of settings including regular education, special education, and vocational settings (UNC School of Medicine, 2011). The TEACCH program provides a wide array of clinical services for individuals on the autism spectrum including diagnostic evaluations, parent training and support groups, social skills and play groups, individual counseling for higher functioning individuals, and supported employment as well as consultation for teachers and other professionals (UNC School of Medicine).

Research supports the use of the TEACCH program for individuals with autism. For example, Schopler et al. (1971) evaluated the effectiveness of Structured Teaching sessions and found that students' attending skills, ability to relate to others, affect, and overall behavior made significant improvements. In a follow-up study, Schopler et al. (1981) surveyed 348 parents of students who participated in TEACCH programs and found parents reported positive outcomes. Short (1984) examined the effects of TEACCH on structured play and work-related behaviors and found significant improvements after intervention. Finally, Sines et al. (1985) interviewed 72 parents and professionals who either had children in TEACCH classrooms or taught in TEACCH classrooms and reported that 86 % of the parents and professionals reported gains in self-help and social skills and reductions in problem behaviors. While these studies offer promising results, it is important to note that none of them included control groups in their design.

Limitations include the lack of comparative evaluations with other behavioral or developmental programs. Additionally, TEACCH classrooms require ongoing professional development and in-class consultative support. Finally, educational materials, staff training, and ongoing consultation require an unwavering focus on special education instruction and resources that are often the first line of cuts when state budgets reduce appropriations to local education agencies.

Developmental, Individual Difference, Relationship-Based Model (DIR)/Floortime Model

The Developmental, Individual Difference, Relationship-Based Model (DIR)/Floortime model is considered a functional-developmental approach that provides a framework to analyze and organize other interventions (Greenspan & Wieder, 1999). DIR/Floortime is popular with educators and parents largely due to its developmental, play-based approach. According to the authors, "Play is the most important enterprise of childhood" (Wieder & Greenspan, 2003). Play supports the acquisition of symbols and symbolic thinking, which in turn represents reality (Wieder & Greenspan). Thus, this play-based approach provides a foundation for future complex symbolic social and emotional relations and higher-order thought. The "D" in the DIR model emphasizes developmental capacities or functional milestones that emerge during early childhood including social engagement, reciprocity, shared attention, creative play, and abstract thought. The "I" in DIR represents the individual differences in sensory-motor regulation and processing which may be in need of treatment to support continued development. The "R" in DIR represents the environmental relationships and interactions that support the practice and development of emotional, social, and cognitive capacities.

The approach emphasizes the progression through six developmental milestones that children need to acquire in order to successfully communicate, think, and cope with the world. Those milestones include (1) self-regulation and interest in the world, (2) intimacy, (3) two-way communication, (4) complex communication, (5) emotional ideas, and (6) emotional thinking (Greenspan, Wieder, & Simmons, 1998).

The DIR model does not include an assessment tool nor is it a discrete intervention. DIR helps systematize and organize other traditional assessments and interventions and includes elements of speech therapy, occupational therapy, and special education (Greenspan & Wieder, 1999). DIR is most often used with toddlers,

preschoolers, and early elementary-aged children and emphasizes the use of naturalistic, play-based teaching sessions. Floortime is a classroom intervention that uses the DIR approach. In Floortime, the parent or educator uses a specific technique where they get down on the floor with the child, follow the child's lead, and attempt to join the child's world in order to help them master their functional, emotional, and developmental capacities (Wieder & Greenspan, 2003). That is, as the adult joins in the child's play, opportunities for pleasurable interaction and engagement increase. The child's actions are considered intentional and purposeful; therefore, the adult follows the child's lead to validate the child's sense of self. During these play sessions, preferred objects and activities are used to motivate the child and facilitate persistence and patience. Floortime sessions are successful when they lead to the acquisition of higher-level skills and concepts taught through the interactive play sessions. Finally, the Floortime intervention is used to provide peer-to-peer interactions with typically developing children.

Support for the Floortime model includes the Solomon, Necheles, Ferch, and Bruckman (2007) study where parents were trained to implement Floortime through intensive consultation. After 12 months, 45.5 % of the 18-month to 6-year-old children with ASD made significant gains in social-emotional interactions and developmental gains. This study represents the only known evaluation of Floortime published in a peer-reviewed journal.

Limitations of Floortime include the no known replications and no known comparative evaluations of the program. Furthermore, unlike the behavioral interventions, the practices used within the program are not clearly operationalized nor are they part of an applied technology with known and extensive empirical support. Additionally, the intensive consultation is a financial barrier to widespread dissemination in under-resourced school districts and in low-income communities. Finally, the assessment used to evaluate the effects of Floortime has questionable validity and unknown psychometrics.

Relationship Development Intervention (RDI)

The RDI is based on research from human development, neurology, and neurodevelopmental disorders and is a comprehensive treatment package to improve social-emotional and relationship skills and intellectual ability in children with autism spectrum disorders (Gutstein, Burgess, & Montfort, 2007; Gutstein & Sheely, 2002). A large portion of the curriculum was developed based on research elucidating the processes typically developing children and adults use to develop and maintain social-emotional relationships.

The model consists of an assessment package that places students in a curricular scope and sequence that guides instruction from birth through adolescence. The curriculum content includes six areas of emotional intelligence including emotional referencing, social coordination, declarative language, flexible thinking, relational information processing, and foresight and hindsight. These content areas are taught systematically through a sequence of activities using eight guiding principles for instruction: (1) building a strong foundation by developing systematic and measurable outcomes; (2) developing a user-friendly environment by making modifications to the program based on the child's ability; (3) implementing guided participation through a master and apprenticeship relationship between the parent and child; (4) improving personal episodic memory; (5) building motivation for dynamic systems; (6) changing communication and increasing the use of declarative statements to predict, reflect, and regulate interaction; (7) creating opportunities for practice through incidental learning; and (8) promoting progressive generalization of skills. Instruction within an RDI model can be delivered by parents and educators in conjunction with trained RDI coaches.

Research evaluating the effectiveness of the RDI model indicates promising results, with improvements in autism severity and cognitive functioning for students who received intervention. For example, Gutstein et al. (2007) evaluated the progress of 16 children with ASD between the ages of 20 and 96 months after 40 months of

intervention. More than half of the children no longer met the criteria for autism on the Autism Diagnostic Observation Schedule (ADOS) and Autism Diagnostic Interview-Revised (ADI-R) after treatment. All children became significantly more socially related, engaged in more reciprocal communication, functioned in school settings with less adult participation, and were perceived by parents as behaving in a dramatically more flexible and adaptive manner. However, there were significant study limitations including the lack of a control group, the range of cognitive impairment (IQ between 70 and 118), and, finally, that children were not randomly selected or assigned to varying levels of treatment but were parent nominated for the research program. Additional research is needed, including investigations with more rigorous methods and comparative evaluations.

The Social Communication Emotional Regulation Transactional Support Model (SCERTS)

SCERTS is a multidisciplinary approach designed to improve the communication and social-emotional abilities of children with ASD. The model was designed for young children from early intervention to early elementary ages and is intended to address the core deficits of ASD by prioritizing intervention on social communication, emotional regulation, and transactional supports within a developmental framework (Prizant, Wetherby, Rubin, & Laurent, 2003). A comprehensive two-volume manual guides practitioners through the implementation of the SCERTS model including a curriculum guide outlining goals and objectives and a detailed assessment for student placement and monitoring through the curriculum (Prizant, Wetherby, Rubin, Laurent, & Rydell, 2006).

The SCERTS intervention focuses on three key areas of instruction: social communication, emotional regulation, and transactional supports. The social communication instructional domain addresses two core communication deficits displayed by children with ASD: joint attention and symbol use (Prizant et al., 2003). Joint attention skills are taught through lessons on communicative intent, social reciprocity, and enhancing communicative gaze. Symbol use is taught through the use of symbolic behavior such as gestural communication and gestures used during play and through lessons that emphasize creative and functional language. Emotional regulation focuses instruction on the ability to regulate emotional arousal and recover from states of emotional dysregulation. Lastly, transactional supports include the use of visual and other environmental supports, curricular modifications, parent training, and multidisciplinary collaboration.

The SCERTS model is implemented across naturally occurring, daily activities. SCERTS developers state that the model was developed after reviewing decades of autism research and that the strategies are consistent with best practices for individuals with ASD. However, there are no known randomized controlled trials or group designs demonstrating the comparative effectiveness of specific SCERTS strategies, nor the curriculum.

Conclusion

The classroom- and center-based programs illustrated above offer an abbreviated overview of the behavioral, developmental, and combined interventions that educators may choose from when attempting to meet the needs of youth with autism in their school. However, several issues should be considered during this decision-making process.

First, although the interventions and naturalistic teaching approaches listed above are used in classrooms across the country, to date, there are no research studies to indicate which intervention is best for which student. Current practice suggests that classroom teachers, building principals, and special education directors may prescribe one intervention over another based on a student's level of cognitive functioning or behavioral needs. For example, in districts where both Structured Teaching and DTT are offered, individuals with

an intellectual disability (ID) are more likely placed in DTT classrooms, while students with an IQ in the average range are placed in Structured Teaching classrooms. The clinical judgment used to support the instructional assignment is not empirically based and may be contraindicated. For example, students with an ID are often placed in the DTT classroom because educators *think* that the massed trials and formal instructional design is a more intensive program and therefore more effective for students with an ID. However, a meta-analysis comparing the effects of DTT and naturalistic approaches by Kane, Connell, and Pellecchia (2010) indicated that naturalistic interventions were more effective than DTT for teaching and maintaining language skills regardless of intellectual ability. Unfortunately, the extent to which these building-level decisions reflect "best practices" is unknown because comparative randomized control trials of ASD classroom interventions are absent in the literature.

Second, there is a fundamental need to identify how response to intervention (i.e., student outcomes) is measured. Many of the historically significant and important studies described above use IQ change score to champion the effects of the intervention. For example, DTT, TEACCH, and RDI studies report changes in either IQ score or "cognitive capacities" after exposure to the intervention (Gutstein et al., 2007; Lovaas, 1987; Mesibov, 1997). Interestingly, IQ is considered a stable and immutable trait (Dietz, Swinkels, Buitelaar, van Daalen, & van Engeland, 2007; Yang, Lung, Jong, Hsu, & Chen, 2010) and thus not amenable to behavioral intervention that targets specific academic, social, or behavioral skills. Indeed, some researchers contend that IQ score and cognitive assessments should not be the outcome measure of academic and behavioral interventions because they measure something other than the response to an intervention. For example, limited attending skills, limited communicative ability, interfering disruptive behaviors, and lack of motivation can make the testing session extremely problematic and potentially result in invalid results (Dietz et al.; Koegel, Koegel, & Smith, 1997). MacMullen, Connell, and Manfredi (2011) presented data at the International Meeting for Autism Research indicating an inverse correlation between interfering behaviors during an IQ testing session and IQ score. Subsequent analyses suggest that the beneficial effects of the classroom intervention decreased interfering behaviors during the testing condition and were correlated with increased IQ scores for those students (Connell, Manfredi, & MacMullen, 2013). Those who use IQ change score may argue that deviating from the testing protocol to accommodate or ameliorate the testing session is acceptable and ensures a valid assessment. But even a quick review of IQ test administration manuals reveals that the developers strongly discourage protocol deviation. Today, researchers have the benefit of interventions that include curriculum-based assessments that place students in a scope and sequence and monitor progress through the program (e.g., STAR, CLM). Furthermore, there are standardized curricular assessments developed to be sensitive to instructional gains and to progress monitor skill acquisition (e.g., ABLLS, VB-MAPP).

There are, of course, concerns with using performance assessments as outcome measures of an RCT. For example, the above-mentioned performance assessments may not assess the domains or constructs of the interventions compared. Thus, it is important to consider how to measure performance gains when the scope and sequence of one intervention differ from another in a comparative evaluation. For example, rate of acquisition through a curriculum may be a more acceptable way to measure comparative performance gains of an intervention. There are also nationally recognized and state performance standards (e.g., Common Core State Standards, 2010) that provide a reasonable starting point when considering how much progress is made compared to how much progress is expected and whether a known criterion is reached after instruction. To be sure, IQ change score needs to be reconsidered as the primary outcome measure of autism interventions, and other measures of student performance outcomes should be investigated or developed with the Common Core State Standards in mind

similar to the accountability assessments used to measure progress of typically developing students in education settings.

Third, the vast majority of ASD classroom interventions require a complex set of teaching skills, including data collection (Lerman, Vorndran, Addison, & Kuhn, 2004; Rakos, 2006), and are time intensive (Lord & McGee, 2001). Special education teachers frequently neglect daily data collection (Walton, 1985) and report that data collection is time-consuming and challenging (Wesson et al., 1984). A study by Pellecchia et al. (2011) illustrated that daily data collection was infrequent despite repeated requests by building administration and classroom consultants in autistic support classrooms. To increase data collection, the authors introduced a school-based consultation procedure called performance feedback (Noell, Duhon, Gatti & Connell, 2002; Noell et al., 2005) which resulted in significant improvements in data collection. Performance feedback procedures have a long and rich history in education settings and have been used to improve procedural fidelity for both academic and behavioral interventions (Noell, Duhon, et al., 2002; Noell et al., 2005). Ongoing coaching and consultation procedures such as performance feedback may need to be included in ASD comparative evaluations to ensure that intervention fidelity is maintained at acceptable levels.

Finally, there is an overwhelming need to conduct randomized clinical trials that compare the relative efficacy of classroom interventions for students with an ASD. For example, comparative evaluations may reveal that student outcomes differ by intervention. If so, it will be important to examine the mediating and moderating variables associated with these outcomes. Subsequent trials can then test interventions that are designed to match individual student characteristics and organizational support. The field is ripe for comparative ASD classroom evaluations, and though there are barriers to conducting comparative RCTs of comprehensive ASD interventions, they are irrefutably needed.

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Supporting the Mental Health Needs of Military-Connected Students

Catherine P. Bradshaw, Katherine E. Figiel, and Haley Deutsch

Supporting the Mental Health Needs of Military-Connected Students

There are approximately 1,450,000 active duty US military service members (U.S. Department of Defense [DoD] Data, 2012b) and about 1.2 million school-aged children of military service members. In a major shift, the 2005 Base Realignment and Closure Act (BRAC) resulted in thousands of military-connected students moving from overseas bases to public schools or between US schools (Institute of Land Warfare, 2005; U.S. Government Accountability Office, 2005). As a result, the majority of military-connected youth are currently served by the nation's public schools (Military K-12 Partners, n.d.).

Research on military-connected students suggested that they may struggle with the military lifestyle and its concomitant challenges (Ursano, Holloway, Jones, Rodriguez, & Belenky, 1989). Clinicians of military families at that time observed a pattern of psychopathology and behavioral maladjustment for youth and families and thus coined the term *military family syndrome* (Jensen, Xanakis, Wolf, Degroot, & Bain, 1991; Ursano et al., 1989). Today's military families may face increased risks due to changing features of the military experience, which in turn may exacerbate the impact of military service deployment on the school-aged youth in these families (Bradshaw, Sudhinaraset, Mmari, & Blum, 2010). Yet, some research has revealed particular characteristics of military-connected students that may serve as unique protective factors. In this chapter, we consider the mental health and support needs of military-connected students. We explore some of the challenges they and their families face as well as the special strengths which may be built upon when providing services to address their unique situation. We conclude with a summary of promising school-based programs and strategies that can support this population of young people and reduce their risk for behavioral and mental health problems.

Understanding the Challenges Faced by Military-Connected Students

There have been a number of changes in the characteristics of military youth and their families which may influence military-connected students' risk for developing behavioral, mental health, or academic problems. For example, over the past few decades,

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the military has become increasingly composed of women; in fact, roughly 15% of military forces are now female (Department of Veterans Affairs, 2011). There has been limited research examining the impact of having a mother in the military as compared to just a father on students' adjustment (Deutsch & Bradshaw, 2012). However, the increasing number of women in the military also means more "dual military marriages," which may present additional challenges for children, particularly if both parents are deployed at the same time.

Another major challenge for today's military-connected students is the increased risk of deployment into combat (Bradshaw et al., 2010). The war in Iraq (through 2011) and the ongoing war in Afghanistan are notable in recent history because of the length of a single tour of duty—often more than a year—and the practice of multiple tours of duty (Deutsch & Bradshaw, 2012). For example, the maximum length of deployment was extended in 2007 from 12 to 15 months in the recently ended Iraq war (Board on Population Health & Institute of Medicine, 2008). In addition, there is a much increased level of danger in these deployments (Deutsch & Bradshaw, 2012). The Iraq war and the ongoing Afghanistan war have resulted in approximately 6,500 US fatalities, all taking a heavy toll on military spouses and military-connected youth. Because the threats of deployment and death continue to be present for military students and their families today, there is likely greater stress incurred by relocations and parental deployment, which makes it particularly important for educators and school psychologists to be aware of this population (Lasser & Adams, 2007).

Military youth face the risk of having a parent (or both parents) deployed, which means being assigned a time-limited tour of duty in a hostile or combat zone. Since 2001, over two million military-connected youth have experienced the deployment of at least one parent (Military K-12 Partners, n.d.). Deployment has been conceptualized as a cycle through five stages (Fitzsimons & Krause-Parello, 2009). In pre-deployment, the soldier learns of the new assignment. In deployment, the soldier is in his or her first month in the new location. Sustainment refers to the time between deployments until the solider receives word he or she will be moving on. Redeployment is receiving a new assignment or returning home, and finally, post-deployment is the reintegration period after the soldier returns home (Fitzsimons & Krause-Parello).

A deployment means a long period of separation from the service member. Separation brings many challenges for youth, including having limited contact with the absent parent, who may miss major events in the child's life. Young children and the deployed parent may miss critical attachment bonding (Barker & Berry, 2009). The remaining parent is generally under the stress of increased parenting responsibilities and reduced support from his or her spouse (Mmari, Bradshaw, Sudhinaraset, & Blum, 2010). A typical characteristic of older military-connected youth is enhanced maturity and increased responsibility for the household and younger siblings, sometimes called parentification (Bradshaw et al., 2010). In the post-deployment period, parents and children must readjust to life together, a potential challenge for all involved (Fitzsimons & Krause-Parello, 2009).

For a portion of military families, the service member has been deployed overseas into a war zone. Although families are often supported by one another and by the greater military community, this experience is characterized by fear for the safety of the absent family member; perhaps as a result, deployment has been associated with high blood pressure, anxiety, lashing out, and other psychological and physiological effects, as described below under "internalizing problems" and "externalizing problems" (Barnes, Davis, & Treiber, 2007; Chandra, Burns, Tanielian, & Jaycox, 2011; Faber, Willerton, Clymer, MacDermid, & Weiss, 2008; Morris & Age, 2009). A smaller subset of military families actually experiences the loss of their military family member. Although US fatalities tapered dramatically once the USA began scaling back its involvement in Iraq in 2010 and have all but ceased since troop withdrawal was completed in December 2011; there were approximately 4,500 American casualties in the Iraq war (DoD, 2012a). To date, there have been about 2000 American casualties in the ongoing war in Afghanistan (DoD). Grief and the loss of a loved one permanently change a family, potentially leading to traumatic bereavement, which can mean

reactions among family members including depression, post-traumatic stress disorder (PTSD) among other negative consequences (Kristensen, Weisaeth, & Heir, 2012).

Another salient characteristic of military youth is that they typically move much more frequently than civilian students. Due to the need for the military parent's skills in different locations, military families move an average of every 2–3 years, a rate four times that of the civilian population (Weber & Weber, 2005). Not surprisingly, frequent moves bring a host of challenges for military youth, including breaking friendship ties and learning to reconnect socially in a new school and neighborhood (Bradshaw et al., 2010). Within the civilian population, a high rate of mobility is a risk factor for difficulty with social relationships, academic failure, delinquency, and other issues (Heinlein & Shinn, 2000); however, military youth differ from highly mobile civilians in that they tend to have greater family stability, a steady income, and consistent parental employment, as well as support for the moving process (Bradshaw et al., 2010). In fact, there is reason to believe that military youth are buffered from many of the iatrogenic effects of high mobility, since military youth tend to exhibit fewer risk behaviors than the general youth population, including lower rates of early sexual debut and academic failure (Hutchinson, 2006; Wickman, Greenberg, & Boren, 2010). Nonetheless, mobility is an important characteristic of military youth that must be considered when determining how best to support them, especially during the transition process.

Potential Mental Health and Academic Concerns Among Military-Connected Youth

Although military youth as a group tend to have particular strengths, they may be subject to a number of mental health and academic challenges as a result of their situation. Yet, the research on these potential effects has varied across studies, most likely as a result of the time at which the data were collected relative to the intensity of conflict and the risk for deployment. For example, one of the first comprehensive studies of the potential impact of military involvement on youth was conducted by Jensen et al. (1995), in which standardized rating scales and structured diagnostic interviews were conducted with 294 military students (ages 6–16) and their parents. Their study revealed that the rates of internalizing problems among military students were consistent with diagnostic rates from other epidemiological studies of the general population. Furthermore, the rates of conduct and behavior problems appeared to be lower among military students than in civilian populations (Jensen et al.; Jensen, Lewis, & Xenakis, 1986; Weber & Weber, 2005). Similarly, past research on academic outcomes has generally indicated that "mobility does not hurt the achievement of military children" (Marchant & Medway, 1987, p. 290).

However, these studies were conducted during peacetime, which may limit the generalizability of these and other previous findings to the today's population of military-connected youth, who, by virtue of their parent's involvement in the current conflict, likely face an increased risk of mental and behavioral concerns. Several researchers have cited increased concern about military adolescents' adjustment, given the relatively high rate of overseas military activity and the increased number of military family relocations (Cozza, Chun, & Polo, 2005; Lasser & Adams, 2007). Therefore, we focus our review of potential mental health and academic consequences for military-connected youth to studies conducted since the beginning of the current conflict.

Social Adjustment

A major challenge for these mobile military-connected youth is the stress associated with separating from friends due to a move as well as the stress of trying to make new ones (Mmari et al., 2010). Before a move, youth may experience their friends pulling away or they may themselves withdraw in preparation for departure (Bradshaw et al., 2010). In either case, social isolation can ensue. In a series of focus groups, military youth reported varying experiences entering new schools

(Bradshaw et al.). Sometimes they would receive no more welcome or orientation than a sheet of paper listing room numbers for classes, whereas other schools had programs orienting youth by introducing them to other students. More than other youth who move less frequently, military-connected students may find themselves having to rebuild friend groups multiple times during their school careers. They are forced to adapt to new social environments, which may become more difficult later on as friend groups are already established in their new schools (Bradshaw et al.).

Another social challenge for military youth, mobile or not mobile, is related to their identity as military youth. These young people may worry that individuals at the schools they attend hold stereotypes that military youth are weird and different or that antiwar faculty or students in the school may unfairly judge them (Bradshaw et al., 2010). Military youth have found that it can be difficult for nonmilitary youth to relate to them because they do not understand what it is like to have a parent deployed and to move from place to place (Deutsch & Bradshaw, 2012). They may worry that other young people will think their desire for support is attention seeking or will respond with pity rather than support (Huebner, Mancini, Wilcox, Grass, & Grass, 2007). Depending on their social facility and the school environment, military youth may or may not be at special risk for being bullied (Mmari, Roche, Sudhinaraset, & Blum, 2009).

Academic Adjustment

Besides adjusting socially, military youth have historically had the academic challenge of moving from a school in one school system to a different school in another system. Military-connected students and their families have reported that students often find that this switch, particularly mid-year, results in both repeated content (e.g., reading *To Kill a Mockingbird* twice) and missed content (e.g., never learning the Pythagorean theorem) (Bradshaw et al., 2010). Further, since required courses and content vary from state to state, military youth may find themselves lacking credits for advancement to the proper grade or even being denied graduating on time (Bradshaw et al.). For high school students, who tend to pin their success more on their academics, this situation can be particularly distressing (Mmari et al., 2010). The Interstate Compact on Educational Opportunity for Military Children, described in greater detail below, should simplify the process of school transfer for military youth.

It has been suggested that the authority, control, structure, continuity, and expectations common in military communities may increase the emphasis on academics among military adolescents, as well as decreasing the rates of disruptive behavior (Weber & Weber, 2005). Yet, students with a deployed parent have been found to have lower test scores, particularly in math and science, an effect which can persist for years after the deployment has occurred (Engel, Gallagher, & Lyle, 2010). This could be due to mobility or to the stress and diminished parental attention when a parent is away (Engel et al., 2010). Additionally, many parents report that their child's overall grades are lower overall during or after deployment (Richardson et al., 2011).

Another school adjustment issue that can occur for military-connected students is the students' participation in extracurricular activities. While parents report that extracurricular activities can help develop students' sense of belonging and connectedness at school as well as their self-esteem and ability to cope generally, mobile military-connected youth sometimes miss out on these opportunities (Bradshaw et al., 2010). This happens most often with sports, where the student may miss tryouts due to a move or the coach may be reluctant to put in a player who is likely to leave again (Mmari et al., 2010). This also might happen with a school play, student government, or leadership positions in other clubs that depend on social capital built over time.

Internalizing Problems

The research findings regarding military-connected youths' internalizing problems vary by age group. While military students as a group

do not necessarily suffer more from internalizing problems than other youth, specific parts of the deployment cycle, such as when a parent is away or has just returned, seem to cause an increase in internalizing symptoms. Very young children have an increased rate of stress and anxiety disorders during a parent's deployment, possibly because they may have too limited communication abilities to express themselves and get their emotional needs met (Gorman, Eide, & Hisle-Gorman, 2010). Very young and school-age children with a deployed parent have a higher rate of emotional problems than non-military-connected youth (Kelley, Finkel, & Ashby, 2003). School-age children with a deployed parent also have a much higher likelihood of developing a mental illness, according to the Youth Psychosocial Symptoms Checklist (Y-PSC) as compared to the general population (Flake, Davis, Johnson, & Middleton, 2009).

Similarly, adolescents who have a deployed parent report greater levels of internalizing problems and more symptoms of disorders on the Y-PSC than do other military-connected adolescents who do not have a parent currently deployed (Aranda et al., 2011). In addition to these symptoms, adolescents also have higher levels of self-reported stress and physiological symptoms of stress such as heart rate and blood pressure when a parent is deployed as compared to not deployed (Barnes et al., 2007). Anxiety has also been shown to increase in adolescents and school-age children during a parental deployment (Chandra et al., 2011). While very young children, school-age children, and adolescents have all been shown to increase in internalizing symptoms during parental deployment, one large study compared adolescents and school-age children and found that it was the adolescents who suffer more from internalizing symptoms (Chandra et al., 2010).

It is common for military-connected children to worry about the safety and health of their deployed parent (Faber et al., 2008). For a few children, these fears will be realized in the form of actual injury to the parent, which can exacerbate internalizing behaviors and may have other lasting impacts on family and social adjustment as well. In the two contemporary wars, with approximately 6,500 American casualties, there are also thousands of military youth across the country grieving the loss of a parent. Grief for a loved one lost under violent circumstances such as war is associated with PTSD and depression, and these occur at a higher rate following a violent death than a natural one (Kristensen et al., 2012). Some specific internalizing problems common to loss of a loved one in war include sleep problems and rumination about or visually enacting the scene of the death and how it might have been prevented (Kristensen et al.).

Externalizing Problems

Like internalizing problems, the risk for externalizing problems varies by age group and by parent deployment status. Youth of all ages are most vulnerable to externalizing problems during deployment and reintegration, when the parent is just returning home (Paris, DeVoe, Ross, & Acker, 2010). While adolescents experienced more internalizing symptoms than externalizing symptoms, very young and school-age children seem to suffer most from both externalizing and internalizing symptoms overall (Deutsch & Bradshaw, 2012).

In very young children, there is a higher rate of diagnosed behavior disorders and mental health visits during parental deployment than at other times (Gorman et al., 2010). Specifically, the externalizing symptoms of young children tend to include behaviors such as arguing, defiance, and appetite changes. In some cases, young children may show clinginess, separation anxiety, or fear of the returned parent, especially if the parent has been gone long enough for the child to not know the parent or to have missed some attachment bonding (Paris et al., 2010). Young children may also regress developmentally and display behaviors appropriate to a younger child, such as temper tantrums, wetting the bed, or an inability to sleep through the night.

For school-age children, externalizing behaviors also increase during deployment (Flake et al., 2009). These behaviors may also be intense and may involve lashing out, such as temper tantrums and anger (Morris & Age, 2009). For adolescents,

some may engage in risk behaviors such as taking drugs or skipping class in response to a parental deployment; however, military adolescents as a group have a lower rate of risk behaviors like substance use and early sexual debut than the general population (Hutchinson, 2006).

Family Adjustment

Family adjustment problems can occur as a result of the challenges of relocating, deployment, and reintegration (post-deployment). Mobility of the family or the active duty parent may cause general tensions among members of the family as individuals cope with transitioning to a new environment, school, job, and social connections (Bradshaw et al., 2010). The military family has been conceptualized as an accordion, stretching wider when the military parent comes home, but retracting to a smaller size when the parent is gone (Virginia Joint Military Family Service Board, 2003). This transition is not without strains and stresses. Youth may feel a loss of parental connectedness when the deployed parent misses out on events in the child's life like the school play or a big game (Mmari et al., 2010). For very young children, attachment processes can be interrupted by the departure of a parent (Barker & Berry, 2009). This interruption of attachment has implications for not only the parent–child relationship but also potentially the child's ability to form social relationships outside of the family. The post-deployment period when the military parent returns home has its own set of challenges as family members acclimate to the altered family dynamic (Fitzsimons & Krause-Parello, 2009). The stresses of military life and sometimes long-distance marriages can lead couples to discord or even divorce, each of which has its own set of risk factors for children (Cozza et al., 2005).

Effect of Parent Mental Health on Youth

Parents in military families may also suffer mental health issues that affect children. In the case of parents returning from combat, symptoms of PTSD are not uncommon (Deutsch & Bradshaw, 2012), and the second-generation transmission of trauma from parent to child is well documented. The functioning of the nonmilitary parent may greatly influence the children as well, as both coping and stress in the caregiver may affect how children respond to their situation (Campbell, Brown, & Okwara, 2011). Either the military parent or the nonmilitary parent may experience emotional numbing or irritability, which is linked to children acting angry or withdrawing (Cozza et al., 2005).

Emerging research now shows that the effects of a parent's mental health on children are more than temporary. The actual development of a child's brain, particularly between infancy and age 3, sets the foundation for the child's emotional life (Center on the Developing Child, 2009). This early brain development depends on a two-way "serve and return" interaction with a parent, where both must respond appropriately to one another (Center on the Developing Child). A parent experiencing anxiety or depression without proper support may be ill equipped to fill this need. Extreme levels of stress and anxiety for a pregnant mother are directly related to deficits in behavioral, cognitive, and emotional problems in infants, as well as attention deficit hyperactivity disorder (ADHD), anxiety, and externalizing behaviors in children ages 8 and 9 (Van den Bergh & Marcoen, 2004; Van den Bergh, Mulder, Mennes, & Glover, 2005). Parental depression and anxiety even well after children are born is problematic; specifically, symptoms of PTSD and traumatic brain injury (TBI) in parents have been linked with both internalizing and externalizing problems for children (Cozza et al., 2011).

Strengths and Protective Factors of Military Youth and Their Families

Although military-connected youth face a range of potential social, academic, and family challenges, it is also important to consider some of the unique strengths and potential protective factors common among these youth and their families and communities. For example, research shows

that military youth and their families employ a wide range of strategies that may help them adapt to their unique circumstances. Social connectedness is one such protective factor that has been identified as a potential moderator of risk factors (Mmari et al., 2010). Social connectedness also provides a unifying theme for many of the ways that military youth and families cope with their unique challenges. For instance, many military families draw strength from the support of other military families (Bradshaw et al., 2010). This is particularly the case when living on base, where parents and youth can receive emotional and material support (like help caring for children or getting homework done) from other families (Bradshaw et al.). In contrast to other military families, National Guard and National Reserve families may feel isolated because they do not live on base or necessarily near other military families (Deutsch & Bradshaw, 2012). Along with receiving actual support from the community, military families stay socially connected by fostering an identity as military (Mmari et al., 2010). This identity comes along with values like sacrifice, honor, discipline, and protecting the weak, as well as a sense of pride and meaning (Aranda et al., 2011).

Additionally, military families may tend to be very close to one another, as mobility is associated with familial closeness (Weber & Weber, 2005). Children often deal with having a parent deployed by becoming very close with the remaining parent (Morris & Age, 2009). At school, students socially connect as well as they can with other military youth or civilian peers, and they sometimes report that the need to be able to make friends quickly has helped them become more outgoing and social (Mmari et al., 2010). Military youth may also join extracurricular activities and make concerted efforts to get close to their teachers (Bradshaw et al., 2010).

Military youth often become flexible and readily able to adapt to new situations. They may also develop greater maturity than other students their age. As described above, parentification is the phenomenon of military-connected youth, particularly older siblings, taking on additional responsibilities to compensate for an absent parent (Bradshaw et al., 2010). Parentification may be both a positive growth experience for youth and a source of stress and age-inappropriate responsibility that detracts from typical development (Harrison & Albanese, 2012).

Supports for Military-Connected Students

While families and children do their best to meet their own needs, there are many ways that schools can provide particular supports to this unique population. Of great importance is that military youth will be better prepared to cope with challenges if they are socially connected (Mmari et al., 2010). Connectedness can be promoted through family-school partnering, relationships with staff and students, and involvement in activities. Below we summarize some promising practices and programs which may be helpful for supporting military-connected youth. It is important to note, however, that there has been limited systematic research on the effectiveness of these approaches. While acknowledging that additional research on these approaches is sorely needed, we summarize some of the extant models for supporting military-connected students and their families.

Partnering School with Family

In order to most effectively support military youth, schools should reach out not only to the child but to the whole family. Connecting school learning in a meaningful way to the student's home life has been shown to increase the student's connectedness to school and improve academic achievement (Wegmann & Bowen, 2010). Parents reported that when they got involved at school, it improved connections for them and their children (Mmari et al., 2010). Furthermore, schools should take care to involve families in interventions supporting the young person by inviting the parent to participate in planning these supports (Deutsch & Bradshaw, 2012). School professionals may find that supporting the student

requires supporting the whole family. Specifically, the non-deployed parent may need a referral for counseling or expanded opportunities to participate in activities and establish social support (Mmari et al., 2010).

Families Overcoming Under Stress (FOCUS) is one intervention with evidence-based components for families experiencing major life stressors; this program was recently adapted for military families (Lester et al., 2011). Several evaluations of the program have shown positive effects for children of military families (Deutsch & Bradshaw, 2012). FOCUS teaches communication and social emotional skills to help families cope with deployment as a group (FOCUS, n.d.). Another home intervention known as "Talk, Listen, Connect" is a video kit featuring the stars of *Sesame Street* exploring topics like coping with deployment, parental injury, and death. Evaluations of the intervention seem to find that it helps students cope (Chevron, 2008; Sesame Workshop, n.d.).

Staff Professional Development

Administrators must promote awareness of military youth in their school community, particularly in schools with a high number of military youth attending (often those located near bases). Schools should provide professional development training for teachers and education support professionals (ESPs) so that they can understand the unique challenges of military youth (Bradshaw et al., 2010; Deutsch & Bradshaw, 2012). One approach is to consider military youth a particular cultural group and use a lens of cultural competence when learning about and interacting with these individuals (Bradshaw et al., 2010). By itself, this can go a long way to enabling staff to better connect with these youth.

Another possible issue related to success in school is a student's experience connecting with teachers. Child-teacher relationships are known to be powerful protective factors for youth in at-risk groups as well as promotive factors for all students (Noam & Fiore, 2004). Strong child-teacher relationships are associated with positive social and academic outcomes for youth (Resnick et al., 1997). It is important to military youth and their parents that teachers understand the unique situation of the child, which may be related to how well the teacher can form a caring, trusting relationship with the child (Bradshaw et al., 2010).

Several such professional development tools are currently available. For example, the Building Resilient Kids curriculum is available for continuing education credit through the Military Child Initiative (MCI) at Johns Hopkins University. This online course is designed to help administrators, teachers, and education support professionals encourage all students to be resilient, particularly military-connected youth (MCI, n.d.). The course covers content about military culture; characteristics of military youth experience such as mobility and deployment; strategies to support youth in crises including separation, disability, and death; strategies to improve school connectedness; classroom-based and school-wide strategies for fostering social emotional skills and resilience for military-connected youth; and partnerships among schools and families.

Two promising programs have been identified to ease transitions for youth via relationships with adults. The Across Ages Program pairs youth with an adult mentor who works with him or her on different activities; the program is mainly focused on decreasing substance use, but it also increases school attendance and school bonding (LoSciuto, Rajala, Townsend, & Taylor, 1996). This program may be adapted for use with military students, and surely the adult mentor component is promising for this population, where a parent may be temporarily absent. The School Transitional Environment Program (STEP) gives high school homeroom teachers responsibilities as counselors and administrators who assist with class choice and work with the students' families (Felner et al., 1993). The program includes a monthly counseling session for each student, and all students in the program attend the same core classes to improve sense of community.

Connecting Students with Students

In addition to training school staff to be aware of military youth needs, the school should make

efforts to connect military students to other students. A strategy commonly recommended by youth and parents in focus groups is a "Meet and Greet," "Student to Student," or buddy program, where the school holds an event for all new students or pairs a recent transfer with another student (Bradshaw et al., 2010; Mmari et al., 2010). Other schools gave new students a welcome package (Mmari et al.). This could include a map, sports schedule, school directory, an activities' list, and other resources.

A school-wide awareness intervention to inform other students about military youth might be another technique to foster connectedness (Deutsch & Bradshaw, 2012). On the other hand, such an intervention could backfire by highlighting military youth as different. Some schools have created support groups for military-connected youth and their families (Mmari et al., 2010). These support groups, as well as clubs or organizations of military-connected youth, bring these students together in their unique experiences and may dually serve to raise awareness among students by planning speakers or other educational events.

In general, schools may find that military students' increased maturity make them well suited for leadership roles that can empower the students' self-esteem and serve the school. Any involvement in extracurricular activities is recommended as a way to socially connect youth; schools should make sure that military students do not miss these opportunities just because they have switched schools in the middle of the year (Bradshaw et al., 2010).

Caring for Special Mental Health Needs

School psychologists and counselors should provide preventive mental health support services to military youth and their families, particularly during times of transition, such as relocations, deployment, or the return home. Clinicians may want to connect with military students by participating in extracurricular activities or co-teaching classes, as this type of less formal contact with military youth may help them overcome some of the stigma associated with help seeking among military youth (Bradshaw et al., 2010). Counselors should also consider employing a broad range of strategies to help these youth cope with stress (Chandra et al., 2010), such as group-based work to foster communication and connections among students, mindfulness techniques to reduce stress, and parent support groups. For example, in schools where there a multiple military youth, clinicians may want to convene support groups for military youth experiencing adjustment challenges due to a move, deployment, or a returned parent (Bradshaw et al., 2010).

A particularly important issue to be aware of is grief upon the loss of a parent. In some cases, it may be necessary to refer youth experiencing particular issues to military or community mental health resources (Deutsch & Bradshaw, 2012). Several forms of cognitive behavioral therapy have been developed that help youth cope with trauma, including traumatic bereavement after losing a parent (Campbell et al., 2011). These therapy models often treat not only the child but also the remaining caregiver (Campbell et al.).

Several other evidence-based intervention programs for youth in crisis have been identified. This crisis could be related to any part of military life, such as moving, a missing parent, stress due to increased responsibilities, or bereavement. One such program, Coping with Stress, is a 15-session group counseling course which addresses depression as a function of multiple sources of stress in a person's life. The course teaches cognitive restructuring to transform negative thinking, and a program evaluation demonstrated significant sustained reduction in adolescent depression (Clarke et al., 2001).

Supporting Access to Military Resources

School professionals should ensure that military youth and families are aware of the resources already offered by the military and connected to these resources when appropriate (Bradshaw et al., 2010). This process may be enhanced by stronger communication between the school and the military (Bradshaw et al.; Mmari et al., 2010).

Some schools with a high concentration of military youth have a military family liaison in the school (Bradshaw et al., 2010). Interestingly, the existence of military resources nearby or the existence of a military family liaison does not necessarily indicate that the families will be informed about available services; therefore, it is important that the school make visible what it has to offer (Bradshaw et al.).

The military offers youth and families many resources that can help them adapt (Mmari et al., 2010). Bases offer services like healthcare and mental health resources for families. The health coverage provided by the military for active and retired service members and their families is called Tricare, and services are administered from an international network of providers including, but not limited to, Military Treatment Facilities and Veterans Administration hospitals for retired service members (Campbell et al., 2011). Additional supports are offered through Army Community Service Centers, Fleet and Family Support, and Air Force Family Service Centers (Virginia Joint Military Family Services Board, 2003). These vary by location and seem to be more common in areas with high levels of military service members. Pre-deployment services may include financial advising about budgeting, bank accounts, etc.; legal services like drafting wills; practical advice on topics like insurance and childcare; and emotional supports, possibly including counseling or support groups (Virginia Joint Military Family Services Board). During deployment, these centers offer education services for youth and parents who remain behind. These programs may cover topics such as coping skills, resourceful ideas on how to improve communication long distance, and referrals to community-based activities. Finally, some Family Service Centers offer educational and planning materials for service members and their families to prepare for homecoming and reintegration (Virginia Joint Military Family Services Board).

Operation Purple summer camps are another resource offered by the military; these are a great way for military youth to meet and connect with other youth like them (Deutsch & Bradshaw, 2012). A joint program for all branches of the military, Operation Purple was founded in 2004 in response to a call from military parents to build stronger connections and identity for their kids (National Military Family Association [NMFA], 2012). It now serves over 45,000 military youth ages 7–17 in at least 14 locations through 1-week, free summer camp programs that focus on healthy relationship building and holistic growth (NMFA, 2012). Additionally, Operation Purple offers special retreats for the families of wounded warriors (NMFA).

Academically, military youth are also eligible to receive free tutoring and preparatory assistance for college entrance tests (see Tutor.com, 2012; see Military Advantage, 2012). This can be particularly helpful since mobile military youth have the challenge of switching schools midyear and potentially missing the opportunity for optional test prep courses if they need to make up other courses. Tutoring and test prep through the Internet may be a source of stability and consistency while classes and teachers are in flux.

Easing Academic and Logistical Problems for Transfer Students

In the previous section, many academic issues for mobile military youth were described. Many of these issues may currently be on their way to national resolution. The Interstate Compact on Educational Opportunity for Military Children, promoted by the Military Interstate Children's Compact Commission (MIC3), allows schools to waive certain credit requirements for military youth to progress with their class (Military Interstate Children's Compact Commission, n.d.). The resolution has now been signed by 46 states (MIC3, 2012). While this resolution does not solve the problem of students having some gaps in content knowledge and some repeated learning materials, it will prevent students from problems like having to repeat grades, take state history for multiple states, or be prevented from graduating.

Besides the Compact, the problems of academic credit transfer for military youth may be largely

solved within a few years by the national Common Core curriculum, which recently went into effect in most states (Common Core State Standards Initiative, 2012). As states begin to implement this standardized curriculum, mobile military students may find that there are fewer gaps and repetitions in their learning careers. A third consideration to improve the academic challenges of military youth is the spread of International Baccalaureate (IB) programs in the USA and abroad. Because this eleventh- and twelfth-grade program has the same requirements for certification across the world, military students who have access to these programs may find continuity among IB schools.

Although there are several possible broad-scale academic solutions on the horizon for military-connected youth, this does not mean there is nothing schools can do to support students. Schools may not be able to change their own policies about graduation and credit transfer requirements. Still, knowing that confusion and conflict can arise from differing requirements, the school can communicate clearly about its own requirements to help students and their families make informed decisions about course registration, etc. (Bradshaw et al., 2010).

Conclusion

Today's 1.2 million military-connected youth experience a number risk factors connected to the modern military experience, especially the increased number, length, and danger of deployments in the recently ended war in Iraq and the ongoing war in Afghanistan. Both parental deployments and high mobility put military youth at risk for problems with social adjustment, family adjustment, academic adjustment, and the resulting internalizing and externalizing problems. Moving frequently triggers the stresses of saying goodbye to old friends and having to acclimate and start over at a new school. Parental deployment, especially into combat, involves the strains of separation and having an absent parent as well as the fear and the real risk of harm to the deployed parent. Simultaneously, the remaining parent either may be under a great deal of stress, which can harm the children, or may cope effectively with the absence of a parent and thus buffer negative effects on their children. While military-connected youth do not necessarily have more mental health issues than their nonmilitary peers, all age groups of military youth have documented increases in symptoms during parental deployment and post-deployment, just after the parent returns home. In spite of these risks, military youth also exhibit some special protective factors like close-knit families, support resources through the military and other military families, especially when living on base, and a meaningful identity of service to the nation. Military youth tend to develop maturity and adaptability which can allow them to become strong individuals and leaders.

Taken together, these risk and protective factors make military-connected youth a unique demographic or cultural group in the nation's public schools. Schools should take note of this population and educate their staff about the challenges and needs of this group. Then, schools should ensure proper supports for military youth. Perhaps most importantly, schools should support social connectedness for military youth in ways such as making them feel welcome upon arrival, introducing them to military and nonmilitary students, and easing access to extracurricular activities. Schools must also diminish academic and social barriers by clearly communicating with families and involving them at school and particularly in any special interventions. Another school strategy is to be aware of and connect military families to military resources available. Finally, schools must be prepared to intervene in crises for military-connected youth who are struggling with a move, deployment, or harm to a parent.

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