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Therapies for Children  
and Adolescents

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# Handbook of Evidence-Based Therapies for Children and Adolescents

## Bridging Science and Practice

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*RGS*

To my parents, Ric and Sandra Steele, for their love and support.

*TDE*

To my parents, Mary and Tom Elkin, Ph.D. I told them I never wanted to be a psychologist. And to The Girls: Allie, Bailey Grace, Emma, Sarah, and Claire. SDG.

*MCR*

To my grandson, Caden, who rocks my world.

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# **I**

## **Establishing the Need and Criteria for Evidence-Based Therapies**

# 1

## **Evidence-Based Therapies for Children and Adolescents: Problems and Prospects**

**RIC G. STEELE, MICHAEL C. ROBERTS,  
and T. DAVID ELKIN**

In the last U.S. Surgeon General's report addressing the issue of children's mental health, David Satcher, M.D., Ph.D., estimated that approximately 20% of children and adolescents in the United States have mild to moderate symptoms of mental illness and that approximately 1 in 10 children has significant emotional health concerns that warrant professional intervention (U.S. Department of Health and Human Services, 1999). These figures are consistent with both earlier and subsequent estimates of mental health needs among school-aged children (e.g., Costello et al., 1996; Roberts et al., 1998; Sturm et al., 2003). More alarming, however, are reports indicating that between 65 and 80% of U.S. youth who need mental health services do not receive them (Kataoka et al., 2002; Sturm et al., 2003).

In a recent review and commentary addressing the disparity between mental health needs and services for youth, Knitzer and Cooper (2006) outlined several specific policy directives with the potential to expand and improve such services. Included in this list was the challenge of "overcoming obstacles to the adoption of evidence-based practices" (p. 674). In his response, Friedman (2006) noted some of the specifics of these obstacles, including the need for expanded evidence-based practices for use with various populations, improved access to information about evidence-based therapies (EBTs), and the identification and evaluation of

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**RIC G. STEELE, MICHAEL C. ROBERTS** • University of Kansas and **T. DAVID ELKIN** • University of Mississippi Medical Center

innovative and promising interventions that are emerging from the literature. In many ways, these challenges are both the impetus and the outline for the current volume.

The primary purpose of the handbook is to provide a comprehensive review of evidence-based therapies across numerous disorders and conditions affecting children and adolescents. Consistent with the call for an expanded view of EBTs and with the need for identification of emerging and promising new therapies (Friedman, 2006), contributors to this volume were asked to include not just therapies with the highest levels of empirical support (i.e., “well-established” therapies; Chambless & Hollon, 1998), but also “possibly efficacious” and “promising” therapies. Recognizing that there are conditions for which there are no “well-established” therapies, our goal was to provide clinicians with the “best available evidence” (American Psychological Association, 2006, p. 278) for treatment options and, at the same time, alert clinical researchers to areas that are in need of further investigation and development.

We also approached this handbook with the goal of helping bridge the gap between clinical research and clinical practice. Evidence from a variety of sources suggests that practicing mental health professionals may not be utilizing EBTs to the extent that they could (e.g., Kazdin et al., 1990; Nelson et al., 2006; Sheehan et al., 2007). Supposing that this gap is due (in part) to a lack of information on EBTs among practicing mental health providers, the most recent APA criteria for accreditation in clinical, school, and counseling psychology specifically call for “training in empirically supported procedures” (APA, 2002). Despite this call, a recent APA resolution (2004) has noted a specific shortage in clinicians’ access to appropriate evidence-based promotion, prevention, and treatment services for children and adolescents in particular.

We see this volume as having particular value in training programs, not just because of the coverage of the EBTs themselves, but also because of the focus that we placed on training issues. For example, Chapter 31 (Leffingwell & Collins) highlights promising approaches for teaching EBTs in graduate training programs. Beyond the chapter specifically on graduate training programs, however, this volume also addresses training issues by its inclusion of chapters on flexible implementation of EBTs (Chapter 25; Southam-Gerow et al.), the importance of therapist, client, and process variables (Chapter 26; Shirk & McMakin), key ethical issues that relate to the implementation of EBTs (Chapter 28; Rae & Fournier), and the importance of evidence-based assessment (Chapter 30; Phares & Curley).

In addition to graduate training programs, mental health service organizations and infrastructures also play a vital role in the dissemination of information regarding EBTs. Recent data indicate that prior training (e.g., taking a class in EBTs) and perceived institutional openness to EBTs accounted for approximately the same amount of variance in practitioners’ self-reported EBT use (Nelson & Steele, 2007). Similarly, Sheehan and colleagues (2007) reported that agency-sponsored trainings were identified as the source of information about EBTs at approximately the same rate (on average) as respondents’ graduate training programs. Such findings

(as well as the shift toward economic policies that favor evidence-based practices; cf. Garber, 2001) underscore the need for mental health service administrators, directors, and training coordinators to be knowledgeable of current and emerging EBTs and to promote an institutional culture that is supportive of such therapies. In response to these needs, the current volume includes chapters designed to assist community mental health centers implement EBTs (Chapter 29; Smith-Boydston & Nelson) and to help individual therapists implement EBTs in “real-world” settings (Chapter 4; Higa & Chorpita) and within diverse populations (Chapter 27; Kotchick & Grover).

At its core, the EBT movement is concerned with ensuring that psychotherapies offered to individuals have adequate evidence for their effectiveness. Although this goal seems fairly straightforward, the movement is not without its critics. A number of authors have raised strong objections to an “overreliance” on the EBT or EST literature (Garfield, 1996; Levant, 2004; Persons & Silberschatz, 1998; Strupp, 2001). Authors have frequently raised concerns about the use of manualized treatments that may not be responsive to the session-to-session issues brought to therapy, a lack of attention to client-therapist relationships, and a failure to make “course alterations” when a given EBT is not producing results.

In our view, part of the controversy surrounding the implementation of EBTs can be attributed to a set of assumptions that may have been made by the APA Task Force on Promotion and Dissemination of Psychological Procedures (1995) and early proponents of empirically supported therapies (ESTs; Chambless et al., 1996). We liken these assumptions to those made by authors of cookbooks or textbooks on cooking. Although most would recognize the necessity of an oven and utensils to cook a chocolate soufflé, it would seem strange for such books to instruct the reader to “go to the kitchen” or to “remove the cooking utensils from the drawers.” We take it for granted that someone cooking a soufflé would be in a kitchen with an oven and would possess the appropriate utensils.

Perhaps this is an oversimplification, but we believe the early writers on ESTs took it for granted that professional psychologists would (by virtue of their training as professional psychologists) be responsive to the idiosyncratic and dynamic needs of individual clients, practice the therapy in the context of a therapeutic relationship, and be sensitive to indications that a particular therapy might not be working well with a particular client. Indeed, Diane Chambless (2007), the chair of the original Division 12 Task Force, recognized that “ESTs are not a substitute for training in building a relationship with the client” and fully endorsed that therapeutic alliance and other process research is important to help ensure that students can form an effective working alliance with their clients. In retrospect, we wonder whether some of the controversy surrounding the identification and promotion of EBTs might have been alleviated if these assumptions had been more clearly articulated earlier in the discussion.

On the other hand, many important issues have been raised by opponents of the EBT movement. And, to some degree, the movement to the broader concept of evidence-based practice (APA, 2006) expands to

explicitly include two additional elements of clinical expertise and patient characteristics—values and context—along with the best research evidence of ESTs. Granted, there is much less research into these additional elements. In our view, there is more scientific support currently for the evidence-based therapeutic approaches than for the other two EBT components, clinical expertise and client/patient values and preferences. These latter two components of the “three-legged stool” require much more empirical attention. Questions of how to inculcate expertise and competence, how to measure such competence, and how to maintain it over the therapist’s career require considerably more scientific effort (Roberts et al., 2005). Questions of what are the relevant patient values, under what circumstances, for what problems, and how are they measured and integrated into professional practice are similarly less well developed but necessitate the attention of clinical researchers. Culture is one important “value” variable; treatment acceptability and therapeutic relationship are others. Throughout this book, we and the chapter authors have tried to make these issues more clearly linked—several chapters attempt to demonstrate the integral nature of these components. But we rely on the cliché that most clinical researchers and practitioners use at some point or another: *More research needs to be done.*

Rather than organizing the book into proponents versus opponents, we see a more valuable approach for the field is to advance the dialogue by demonstrating integration—forming into sides has fractionated professional psychology almost more than anything else has. Of course, the reaction and responses to each position have helped demonstrate points at which greater attention in research needs to be focused and where greater clarity in communication needs to be articulated. As in the case of negative reactions to manualized treatments, the objections helped advance the dialogue through responses such as by Kendall and Beidas (2007) calling for “flexibility within fidelity.” If professionals are willing to listen with the same open ears they endeavor to use in therapy, they might not have as strong a reaction as they expressed toward the clinical researchers. If “opponents” of ESTs are not cast as “anti-science,” and if the profession can lower the decibels so that communication can take place, then diplomacy might help the field become more amenable to advancement for the benefit of the profession and the clients we serve.

## REFERENCES

- American Psychological Association (2002). *Guidelines and Procedures for Accreditation of Programs in Professional Psychology*. Washington, DC.
- American Psychological Association (2005). *Policy Statement on Evidence-Based Practice in Psychology*. Accessed on January 6, 2007, from <http://www.apa.org/practice/ebpstatement.pdf>.
- American Psychological Association Presidential Task Force on Evidence-Based Practice (2006). Evidence-based practice in psychology. *American Psychologist*, 61, 271–285.
- American Psychological Association (2004, February). *Resolution on Children’s Mental Health approved by Council of Representatives*. Washington, DC.

- Chambless, D. L. (2007). The role of empirically-supported treatments in teaching evidence-based practice. Paper presented at the annual meeting of the Council of University Directors of Clinical Psychology, Savannah, GA, January. PowerPoint slides retrieved February 10, 2007, from [www.cudcp.org](http://www.cudcp.org).
- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66, 7–18.
- Chambless, D. L., Sanderson, W. C., Shaham, V., Bennett Johnson, S., Pope, K. S., Crits-Christoph, P., et al. (1996). An update on empirically validated therapies. *Clinical Psychologist*, 49, 5–18.
- Costello, E. J., Angold, A., Burns, B. J., Erkanli, A., Stangl, D. K., & Tweed, D. L. (1996). The Great Smokey Mountains Study of Youth: Functional impairment and serious emotional disturbance. *Archives of General Psychiatry*, 53, 1137–1143.
- Division 12 of the American Psychological Association Task Force on Promotion and Dissemination of Psychological Procedures. (1995). Training in and dissemination of empirically-validated psychological treatments: Report and recommendations. *The Clinical Psychologist*, 48, 3–23.
- Friedman, R. M. (2006). Children's mental health: A discussion and elaboration on Knitzer and Cooper's article. *Data Trends*, 137, 1–7. Accessed on January 8, 2007, from [http://datatrends.fmhi.usf.edu/summary\\_137.pdf](http://datatrends.fmhi.usf.edu/summary_137.pdf).
- Garber, A. M. (2001). Evidence-based coverage policy. *Health Affairs*, 20, 1–21. Accessed on February 12, 2007, from <http://content.healthaffairs.org/cgi/reprint/20/5/62.pdf>.
- Garfield, S. L. (1996). Some problems associated with "validated" forms of psychotherapy. *Clinical Psychology: Science and Practice*, 3, 218–229.
- Kataoka, S. H., Zhang, L., & Wells, K. B. (2002). Unmet need for mental health care among U.S. children: Variation by ethnicity and insurance status. *American Journal of Psychiatry*, 159, 1548–1555.
- Kazdin, A. E., Siegel, T. C., & Bass, D. (1990). Drawing upon clinical practice to inform research on child and adolescent psychotherapy: A survey of practitioners. *Professional Psychology: Research and Practice*, 21, 189–198.
- Kazdin, A. E., & Weisz, J. R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66, 19–36.
- Kendall, P. C., & Beidas, R. S. (2007). Smoothing the trail for dissemination of evidence-based practices for youth: Flexibility within fidelity. *Professional Psychology: Research and Practice*, 38, 13–20.
- Knitzer, J., & Cooper, J. (2006). Beyond integration: Challenges for children's mental health. *Health Affairs*, 25, 670–679.
- Levant, R. F. (2004). The empirically validated treatments movement: A practitioner/educator perspective. *Clinical Psychology: Science and Practice*, 11, 219–224.
- Nelson, T. D., & Steele, R. G. (2007). Predictors of practitioner self-reported use of evidence-based practices: Practitioner training, clinical setting, and attitudes toward research. *Administration and Policy in Mental Health and Mental Health Services Research*, 34, 319–330.
- Nelson, T. D., Steele, R. G., & Mize, J. (2006). Practitioner attitudes toward evidence-based practice: Themes and challenges. *Administration and Policy in Mental Health and Mental Health Services Research*, 33, 398–409.
- Persons, J. B., & Silberschatz, G. (1998). Are results of randomized controlled trials useful to psychotherapists? *Journal of Consulting and Clinical Psychology*, 66, 126–135.
- Roberts, M. C., Borden, K. A., Christiansen, M. D., & Lopez, S. J. (2005). Fostering a culture shift: Assessment of competence in the education and careers of professional psychologists. *Professional Psychology: Research and Practice*, 36, 355–361.
- Roberts, R. E., Attkisson, C. C., & Rosenblatt, A. (1998). Prevalence of psychopathology among children and adolescents. *American Journal of Psychiatry*, 155, 715–725.
- Sheehan, A. K., Walrath, C. M., & Holden, E. W. (2007). Evidence-based practice use, training, and implementation in the community-based service setting: A survey of children's mental health service providers. *Journal of Child and Family Studies*, 16, 169–182.
- Strupp, H. H. (2001). Implications of the empirically supported treatment movement for psychoanalysis. *Psychoanalytic Dialogues*, 11, 615–619.

- Sturm, R., Ringel, J. S., & Andreyeva, T. (2003). Geographic disparities in children's mental health care. *Pediatrics*, 112, e308–e315. Accessed on January 8, 2007, from <http://www.pediatrics.org/cgi/content/full/112/4/e308>.
- U.S. Department of Health and Human Services (1999). *Mental health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.



# 2

## **Empirically Supported Treatments and Evidence-Based Practice for Children and Adolescents**

**MICHAEL C. ROBERTS and ROCHELLE L. JAMES**

A number of forces exert influence on professional psychology. Though these forces change over time, they continue to impact all aspects of the field. Psychologists recognized that the mental health professions had not yet developed an adequate scientific base for making treatment decisions and demonstrating the “worth” of psychological interventions. The rise of managed care concomitantly compelled many changes in the way psychologists provided treatment and were reimbursed (Roberts & Hurley, 1997). Increasing demands were made for evidence that psychological treatments would work if they were to be eligible for payment. As outlined by Steele and Roberts (2003), the movement toward empirically supported treatments (ESTs) and, correspondingly, evidence-based practice (EBP) came from

(a) a strong desire on the part of psychologists oriented to the scientist-practitioner model to enhance the scientific base for clinical practice (Calhoun et al., 1998; Davison, 1998); (b) a focus on accountability in both practice and research (Weisz et al., 2000); and (c) the policies of managed care organizations, which increasingly provide financial reimbursements only to those therapies and interventions with established utility. (p. 308)

Although market forces might appear to be a driving force, initiatives internal to psychology motivated much of the effort, specifically; these

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included the scientist-practitioner model of integration in which science informs practice, which informs science in a reciprocating process.

The immense need for effective interventions has not abated over the decades of developments in mental health, especially for children and adolescents, who have been chronically underserved (Steele & Roberts, 2005). Although various efforts have been made over time to develop and evaluate effective treatments (e.g., Eysenck, 1952; Levitt, 1957, 1963), nothing seems to have catalyzed the profession to take action more than the efforts of the Task Force on Promotion and Dissemination of Psychological Procedures of the Division of Clinical Psychology of the American Psychological Association (APA). The task force established criteria that it used to identify and categorize effective treatments for specific disorders (Chambless et al., 1996, 1998). These designations were initially “empirically validated” with a later change in terminology to “empirically supported treatments,” or ESTs. As will be examined later, reactions, both favorable and unfavorable, were swift and ongoing. Although the initial focus had been mostly on treatments for adults, the subsequent efforts, including ones by specialty practice divisions of the APA, extended the identification of ESTs to child/adolescent and pediatric psychology treatments (Kazdin & Weisz, 1998; Lonigan et al., 1998; Spirito, 1999).

### **EMPIRICALLY SUPPORTED TREATMENTS**

In 1993, the APA Division of Clinical Psychology (Division 12) organized a Task Force on Promotion and Dissemination of Psychological Procedures, headed by Dianne Chambless. This task force examined and reported on the ways by which information about empirically validated treatments, later termed “empirically supported treatments,” is disseminated to clinical psychology students, practicing clinical psychologists, third-party payers, and the general public. Subsequently, Division 12 approved the task force’s report and published it in *The Clinical Psychologist* (Task Force, 1995). In this report, the task force delineated three categories and their criteria for classifying the treatments based on their level of empirical support. The criteria for well-established treatments required two studies using a between-group design from different researchers that demonstrate efficacy of treatment (demonstrating superiority to pill or psychological placebo or to another treatment and/or demonstrating equivalence to an established treatment) or a series of studies using a single-case design that demonstrated efficacy of treatment utilizing a rigorous experimental designs as well as a comparison of treatment intervention to another). In these criteria, the treatments must have manuals to guide implementation and permit replication. In all studies, the client characteristics must be detailed. To meet the criteria for the category of “probably efficacious,” there needs to be two studies demonstrating treatment produced more effective outcomes than a control group, two studies from the same researchers meeting the well-established treatments criteria, or a small series of single-case design experiments. The third category, experimental treatments, refers to

psychotherapies that do not meet the criteria for either of the two higher-level categories. The task force also listed 25 specific treatments that met its criteria for empirical support (Task Force, 1995).

As an additional component of its activities, the task force developed a list of treatments, including the 25 ESTs as well as other treatments, in which clinical psychology doctoral students and interns might obtain instruction or training. The task force surveyed clinical training directors and internship directors of APA-approved sites in regards to which of these treatments are included in the training of their students or interns. One in five APA-approved clinical programs failed to provide even minimal coverage of ESTs in their courses and practicum. In addition, most internships did not require competence in an EST. In light of these findings, the task force put forth several recommendations for training at the predoctoral, internship, and continuing education levels. A number of recommendations concerning the dissemination of information about ESTs to clinicians, third-party payers, and the public were also laid out in the task force's report (Task Force, 1995).

Following the 1995 Task Force report, Chambless and colleagues published updates on ESTs in both 1996 and 1998. The first update expanded the list of ESTs and attempted to clear up misconceptions about their use. The focus of this report lay in discussing the use of ESTs with ethnic minority individuals and the effects of the interplay of aptitude and treatment on treatment outcome (Chambless et al., 1996). The second update in 1998 reviewed the procedure for evaluating treatments according to the criteria as well as expanded the list of ESTs, particularly in the areas of couples and family therapies to treat psychological disorders, treatments for those with severe mental illness, and health psychology interventions (Chambless et al., 1998).

The discussion and evaluation of ESTs have rapidly increased since then as evidenced by several prominent journals dedicating special sections to the topic of ESTs. A special section of the *Journal of Consulting and Clinical Psychology* (1998) included articles evaluating specific areas of psychosocial interventions, such as child and adolescent treatments (Kazdin & Weisz, 1998), and articles commenting on issues related to ESTs (e.g., Calhoun et al., 1998). After the Chambless Task Force, another task force was formed to focus more specifically on empirically supported interventions for children and adolescents (Lonigan et al., 1998). The reports of this child-focused task force were published in a special issue of the *Journal of Clinical Child Psychology* (1998). This series of articles covered ESTs for children and adolescents with depression (Kaslow & Thompson, 1998), phobia and anxiety disorders (Ollendick & King, 1998), autism (Rogers, 1998), conduct disorder (Brestan & Eyberg, 1998), and attention deficit hyperactivity disorder (Pelham et al., 1998). The *Journal of Pediatric Psychology* also devoted several special sections (1999–2000) to ESTs for pediatric problems such as recurrent pediatric headache (Holden et al., 1999); recurrent abdominal pain (Janicke & Finney, 1999); procedure-related pain (Powers, 1999); disease-related pain (Walco et al., 1999); severe feeding problems (Kerwin, 1999); pediatric obesity (Jelalian &

Saelens, 1999); disease-related symptoms of asthma, diabetes, and cancer (McQuaid & Nassau, 1999); bedtime refusal and night waking (Mindell, 1999); nocturnal enuresis (Mellon & McGrath, 2000); and constipation and encopresis (McGrath et al., 2000).

In addition, several books provide detailed descriptions of treatments and their empirical support for each of a wide range of psychological problems. For example, *What Works for Whom?* by Roth and Fonagy (2005) provided evidence toward answering the question of which psychosocial treatments have been shown to be beneficial for which client populations. Books more specific to the psychological problems of childhood and adolescence include *What Works for Whom? A Critical Review of Treatments for Children and Adolescents* by Fonagy et al. (2002) and *Psychosocial Treatments for Child and Adolescent Disorders: Empirically Based Strategies for Clinical Practice* by Hibbs and Jensen (2005).

In the expanding discussions on ESTs, Chambless and Ollendick (2001) reviewed the criteria and treatments described by several task forces and other work groups and found that the various groups used slightly different criteria when classifying treatments. Nonetheless, different groups reviewing the same treatment generally came to compatible conclusions about that treatment's level of empirical support. Chambless and Ollendick integrated these various criteria into three general categories of empirical support and identified 108 adult and 37 child treatments as Category I or Category II ESTs. Thus, the number of treatments demonstrating substantial empirical support has multiplied well beyond the 25 ESTs listed by the original 1995 task force.

## EVIDENCE-BASED PRACTICE

The concept and terminology of "evidence-based practice" (EBP) provide a more encompassing approach to applying research-based information to practice. Deriving from evidence-based movements in other countries and in American medicine, this concept has been embraced by most, if not all, health-care provider professions. In 2005, the Presidential Task Force on Evidence-Based Practice of the American Psychological Association (APA) was appointed to develop a position statement regarding the integration of science and practice for health services provided by professional psychologists. The work of the task force resulted in a policy statement approved as APA policy by the Council of Representatives (July 2005) and a full report published in the *American Psychologist* (APA Presidential Task Force on Evidence-Based Practice, 2006). While noting some of the controversy, the report provided the following definition: "Evidence-based practice in psychology (EBPP) is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (APA Presidential Task Force on Evidence-Based Practice, 2006, p. 273). As the task force noted, the psychology position emphasized clinical expertise and gave broader attention to patient characteristics than the definition of EBP from the Institute of Medicine (IOM, 2001):

"Evidence-based practice is the integration of best research evidence with clinical expertise and patient values" (p. 147). Although the IOM definition moderated scientific evidence by clinical expertise and patient values, in effect, the psychology definition gave equal weight to science, clinician's expertise, and patient characteristics. Hence, the metaphor of a "three-legged stool" or "pyramid" has been used to describe equal footing, or balance, for the three components of EBP, at least for psychology.

The task force report on EBP described "best research evidence" as deriving from a variety of research strategies including clinical observations, qualitative research, systematic case studies, single-case designs, public health and ethnographic research, therapy process and outcome studies, randomized clinical trials (RCTs), and meta-analyses (p. 274). The report also defined clinical expertise as "competence attained by psychologists through education, training, and experience that results in effective practice" (p. 275) and outlined the components to include (1) case formulation and planned treatment based on assessment and diagnostic judgment, (2) skillful treatment provision and decision making with monitoring of progress, (3) interpersonal skills to develop a therapeutic relationship, (4) self-reflection and skill development, (5) consideration of research evidence, (6) awareness of influence from "individual, cultural, and contextual differences" (p. 277), (7) seeking other resources such as consultation and adjunctive services, and (8) having a "cogent rationale for clinical strategies" (p. 278). Patient characteristics include attention to the patient's belief systems and worldview, personal goals, perceptions of problems and treatment, personal situation, social and cultural characteristics (e.g., gender/ethnicity, race, and social class), developmental considerations, and variations in the way disorders are manifested. The report concluded that "the purpose of EBPP is to promote effective psychological practice and enhance public health by applying empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention" (p. 280).

Reactions to the EBP resolution and report (as well as to the drafts) included calls for changing the report, from those who wished to have greater emphasis on RCTs and those who wished to diminish any emphasis on them, from those who wanted ESTs to be recognized and those who wished to avoid "cookbook" psychotherapy viewed by them as promulgated by manualized treatments in RCTs, and from those who wanted less importance given to clinical expertise and those who wanted statements included such as "we [psychologists] are competent, we know what we're doing, and we do it well." The task force responded with the philosophy of balance—not privileging one component in the three parts of EBP: research base, clinical expertise, and patient characteristics. The EBP resolution was approved by the Council of Representatives with a strong endorsement, but many in the profession recognize it as a statement dominated by political realities within the organization. The EBP position statement does not endorse any particular treatment but points to a broader integration of all components. The EBP statement also does not establish any criteria by which to judge the applicability of interventions, approaches, or sets of information for the

clinician to use. In 2006, another APA task force was formed to apply EBP principles to children, adolescents, and their families.

Other health-care professions have also adopted an orientation to evidence-based practice including various subfields of medicine, nursing, occupational therapy, physical therapy, public health, social work, rehabilitation, special education, speech/language/hearing specialists, and developmental disabilities (and even the nonhealth professions of librarian/information specialists). Additionally, other countries including Germany, the United Kingdom, Australia, and New Zealand have promoted EBP concepts. Canadian psychology, for example, through the Canadian Psychological Association (Section on Clinical Psychology) and the Canadian Register of Health Service Providers in Psychology, has taken initiatives to advance EBP through its policy and educational efforts.

Many aspects of EST can be incorporated into EBP, but they are not the same and will be treated distinctively. As perhaps a less rigorous approach, the EBP orientation may be less offensive to some in psychology who objected to what was perceived as an overreliance on empirically derived information of the EST movement and the neglect of the clinician's expertise and experience.

### **PROGRESS TOWARD DISSEMINATION AND ADOPTION OF ESTS FOR CHILDREN AND ADOLESCENTS**

While clinical child psychology has made substantial progress in identifying and evaluating ESTs for children, the field has lagged behind adult-focused clinical psychology in the dissemination of its treatments during the years following the 1995 Task Force report. Herschell et al. (2004) conducted two reviews of publications from January 1995 through December 1999 that provided evidence to this effect. First, their PsycINFO search revealed that six of the seven empirical studies associated with EST dissemination focused on treatments for adults. Second, their survey of publications in the *Journal of Clinical Child Psychology* and the *Journal of Consulting and Clinical Psychology* found that, compared to child treatments, adult treatments were the focus of twice as many treatment evaluation and dissemination articles.

Several individual professionals, specialty workgroups, system reform projects, and national organizations have made substantial effort to close this gap between child and adult dissemination progress. For example, at the national level, the *Report of the Surgeon General's Conference on Children's Mental Health: A National Agenda* (U.S. Public Health Service, 2000) and the National Institute of Mental Health's (NIMH) *Blueprint for Change: Research on Child and Adolescent Mental Health* (2001) encouraged the development, implementation, and dissemination of ESTs as necessary for the progress of children's mental health. Yet, much improvement still needs to be done in the dissemination of child-focused ESTs.



Herschell et al. (2004) reviewed four methods that can be used to increase the dissemination of ESTs for children. First, treatment manuals give detailed descriptions of session activities, which facilitate standardizing treatment and maintaining treatment fidelity. Herschell et al. recommended that treatment manuals be more user-friendly for clinicians by including information on development, theory, therapeutic process factors, procedures for integrating various systems, and strategies for developing positive relationships with clients. For each session, treatment manuals should also contain integrity checklists and measures of therapist adherence and ability (Herschell et al., 2004).

Second, graduate education can serve an important role in disseminating ESTs to the future professionals of the field. Training in ESTs should begin early in students' graduate careers so that students may acquire an understanding of how flexibility and creativity play a part in the effective use of ESTs. Such training should consist of didactic classes covering a wide range of ESTs and supervised practicum experiences utilizing ESTs. It was even proposed that evidence of competency in a child EST be added to the graduation requirements (Herschell et al., 2004). In a survey of 172 doctoral students from 60 APA-accredited clinical, counseling, and school psychology programs, Karekla et al. (2004) found that early didactic and practicum training in ESTs and treatment manuals predicted a more positive attitude toward ESTs and manuals. In addition, those students who received early EST training were more likely to have plans to use ESTs and obtain additional training in ESTs in the future. In a 10-year follow-up to the 1995 Task Force survey, Woody et al. (2005) found that APA-accredited clinical psychology doctoral and predoctoral internship programs have increased EST dissemination through didactic training. However, supervised training in ESTs has decreased, with fewer than half of programs now providing it.

Third, continuing education (CE) can be used as a method of disseminating ESTs to clinical practitioners. Longer, more comprehensive CE formats that include follow-up components would provide additional opportunities for supervision to ensure that skills have been acquired and are being used properly. Advances in communication technology such as videoconferencing can also be utilized to provide CE to clinical practitioners in various locations and aid in making follow-up CE sessions possible (Herschell et al., 2004). Herschell et al. (2004) also suggested that APA provide more monitoring of CE and that states require clinicians who treat children to complete at least some of their CE credits in child ESTs. Focusing a series of CE workshops on a particular child EST would allow clinical practitioners the chance for more in-depth learning about an EST that they may wish to use with their clients.

Fourth, empirically supported training protocols can provide effective methods for using training as an EST dissemination tool (Herschell et al., 2004). Two types of research are needed in this area. Investigations of preexisting protocols' effectiveness need to be conducted. Analyses of training components are necessary to determine the critical components related to effectiveness, which would allow EST training protocols to be streamlined (Herschell et al., 2004).

In addition to improving these four dissemination strategies, there are several areas for future progress in dissemination of ESTs for children, including improvements in both research and theory; collaborations among researchers, clinicians, and policy makers; and the utilization of technology methods for dissemination. Herschell et al. (2004) called for more empirical examination of the processes by which ESTs for children can be disseminated, transported to community settings, and used effectively with those child populations that are underrepresented in the current research. Silverman et al. (2004) responded to this petition for more basic research with their own call for the development of more basic theory on effectiveness, transportability, and dissemination to explain the mechanisms by which they work and to direct research in these areas. Thus, clinical child psychology should build on its existing strengths such as its firm basis in highly developed theory as well as its focus on prevention programs and separate identity from downwardly extended adult treatments (Herschell et al., 2004).

Researchers, clinicians, and policy makers need to collaborate so that research is informed by practice, funding opportunities are available for research, and practice and public policy are grounded in empirical evidence. Practice research networks are models of such collaboration, such as outlined by Borkovec (2002, 2004). Similarly, Weisz and colleagues have proposed methods of collaboration between researchers and clinicians (Weisz & Addis, 2006; Weisz et al., 2004). Also, the utilization of technology methods such as audiotapes, videotapes, interactive CDs, the Internet, and telehealth will become increasingly useful in communicating information about ESTs in the future (Herschell et al., 2004). For example, Ollendick and Davis (2004) described a Web-based strategy that should facilitate clinical practitioners' ability to efficiently search through research literature and evaluate the evidence for particular treatments.

Weisz et al. (2004) also provided recommendations for future efforts in the dissemination of ESTs and EBP. Professionals in the field of psychology as well as across disciplines need to come to a consensus on the methods and criteria for identifying ESTs and the treatments classified as ESTs. Dissemination of ESTs must be accompanied by the dissemination of those empirically robust assessment and diagnosis procedures. Besides ESTs, EBP requires intermittent assessment to evaluate whether the treatment being employed is actually benefiting the client as well as modification of intervention strategies when indicated. Unfortunately, this process of "assess-treat-reassess-adjust treatment" has not yet become standard practice (Weisz et al., 2004, p. 303). This continual evaluation of outcomes should be conducted on all evidence-based practice. In contrast to the traditional medical-pharmaceutical model, Weisz et al. (2004) proposed a "deployment-focused model of intervention development and testing (p. 304)." In this model, constant collaboration between researchers and clinicians allows for the development of practice-ready treatments and the generation of empirical evidence in real-world settings for the effectiveness of the treatment as a whole as well as the individual components and mechanisms of change that contribute most to treatment gains. Consistent



with Weisz et al.'s deployment-focused model, Shirk (2004) advocated for effectiveness trials as the next step in dissemination but cautioned researchers that they might have to challenge those beliefs of practitioners that pose a barrier to disseminating ESTs in clinic settings.

The actions the State of Hawaii took to comply with the Felix Consent Decree provide an example of large-scale efforts to address questions of treatment effectiveness and practitioner skepticism of outcome research. In 1994, the Felix Consent Decree outlined the settlement of a class action lawsuit brought against the State of Hawaii in federal court regarding the mental health services received by children with special needs in the state education system. This settlement mandated the State of Hawaii to establish a statewide system of care to provide children with all the mental health services they need to be able to benefit from their free public education (Chorpita et al., 2002). To develop a system of care, the state founded several local Family Guidance Centers (FGCS); contracted with private agencies to provide services; cultivated partnerships among the mental health system, the university, and the families of the children being served; and increased the quantity of services available to meet the rising need. Then, in October 1999, Hawaii's Child and Adolescent Mental Health Division (CAMHD) addressed the quality of services when it launched the Empirical Basis to Services (EBS) Task Force. The EBS Task Force employed a similar methodology as the national-level APA Division 12 task forces as well as extended their efforts by evaluating the effectiveness of treatments for children. In addition to publishing the findings, CAMHD took further steps to ensure the dissemination of ESTs to practitioners statewide by distributing easy-to-use practice guidelines, providing training and consultation in implementation of specific ESTs, and conducting quarterly assessments of treatment outcomes (Chorpita & Donkervoet, 2005; Chorpita et al., 2002). Thus, large-scale implementation of ESTs for children can be done.

## **CRITICISMS AND CHANGES OVER TIME**

Many criticisms by virtually all sides have addressed the EST movement (and so far less so the more expansive EBP conceptualization). While proponents of EST applaud the increased focus on scientifically derived recommendations in the EST movement, opponents of EST point to an overreliance on the application of highly rigorous research methodology and a seemingly rigid set of criteria for inclusion of therapies on lists (McCrary, 2000).

The rigorous research methodology of randomized clinical trials (RCTs) has been challenged because it emphasizes internal validity to the neglect of external validity (i.e., neglect of "real-world" situations and diagnoses in the literature; Blatt, 2001; Goldfried & Wolfe, 1996). ESTs have been criticized for not attending to issues and types of problems and disorders exhibited by "real-world patients." Because results from RCTs are considered the highest level of scientific basis for therapy, RCTs have been criticized for

overly restricting the diagnoses for inclusion of patients in the experimental trials. The restrictions on diagnoses limit generalizability of the treatment findings to a narrow category of presenting problems (Blatt, 2001; Goldfried & Wolfe, 1996; Havik & Vandenbos, 1996; Westen et al., 2004). This criticism results from the need to enhance internal validity while perhaps sacrificing external validity. Recently, RCT investigators have attempted to enhance the applicability of RCTs by lessening restrictiveness and by conducting effectiveness studies in community-based settings where, it is asserted, more complex cases are presented (cf., Doss & Weisz, 2006; Kazdin & Whitley, 2006).

Another criticism has been that some commentators consider ESTs to be too narrow as a conceptualization of psychotherapy and do not capture the essence of the process (Luborski, 2001; Strupp, 2001). For example, Jensen et al. (2005) found that most research does not attend to the nonspecific therapeutic variables such as therapeutic alliance, positive regard, therapist attention, positive expectations, and dose and intensity effects. In some ways, the clinical researchers working on ESTs appear to have assumed these elements to be important in psychotherapy but not the objects of concern when delineating the empirical base to psychological interventions. However, the EST advocates have noted the complexity of psychotherapy and the importance of variables that are categorized in patient values and clinical expertise in EBP (e.g., Chambless & Ollendick, 2001).

Because RCTs rely on treatment manuals to standardize therapy for scientific examination, derogation of EST also focused on manualized treatments as ill-equipped to handle what is perceived as a more complex therapeutic situation than a "cookbook" or manual can provide. Treatment manuals used in RCT research have raised concerns about applications to therapy outside the research lab setting because manualized treatments are thought to bind the therapist in a prescribed set of actions (Davison, 1998; Messer, 2004). Fonagy (2001), while noting some limitations, did suggest that manuals provide "a clear structured and coherent framework that guides the therapeutic process" (p. 647). Others have presented that rigidly following a therapy manual is not necessary for positive results, but the manual should be used to guide interventions (Abramowitz, 2006). Kendall and Beidas (2007, p. 16) call this "flexibility within fidelity" to the manual.

Other concerns about the EST lists revolve around the potential use to restrict payment to psychologists by managed care to only those treatments on the list; thus, some psychologists would not receive payment for therapies they currently do if the treatments are not on the EST list. The lists themselves imply approval for some therapeutic techniques and disapproval for others. Some have argued that therapies appear to be equally effective and that the implication of one treatment as better than another is detrimental to the profession (Slife et al., 2005).

Several surveys have established that ESTs are not widely utilized by practitioners (Mussell et al., 2000; Persons, 1995). Surveys of practitioners indicate many negative perceptions and lack of understanding

about ESTs in particular (Addis & Krasnow, 2000; Aarons, 2004). This failure to implement may be due to a variety of barriers including inadequate training and dissemination of usable literature, therapists' resistance to change, misperceptions of treatment manuals, lack of economic incentives to adopt, difficulty in gaining skills, among others (e.g., Nelson et al., 2006). Several efforts are being made to increase dissemination and usefulness of information (e.g., Riley et al., 2007).

In contrast to the orientation to therapeutic techniques of the EST approach, others have called for a focus on therapeutic relationships (Wampold, 2001). The Division of Psychotherapy (Division 29 of APA) in its Task Force on Empirically Supported Therapy Relationships developed a list of empirically supported therapeutic relationships that resulted in a book, *Psychotherapy Relationships That Work* (Norcross, 2002). This task force presented evidence for such elements of relationships as therapeutic alliance, empathy, congruence, and positive regard. Norcross (2002) articulated the view that "concurrent use of empirically supported relationships and empirically supported treatments is likely to generate the best outcomes" (p. 442). In the child therapy area, Shirk and Karver (2003) found that relationship characteristics were related to therapeutic outcomes.

Instead of the EST approach, Beutler et al. (2002) have argued for a greater focus on empirically establishing principles of change rather than the prescriptive approach of therapies for specific disorders interpreted from the EST approach. In a later effort, Castonguay and Beutler (2006) presented the results of a task force of the Division of Clinical Psychology aimed at delineating empirically based principles of change in psychotherapy. In the same series of reports, Beutler et al. (2006) articulated a conceptualization of therapy that includes "aspects of the patient and therapist (participant factors), those relating to the development and role of the therapeutic relationship (relationship factors), and those that defined the application of formal interventions that are implemented by the therapist (techniques factors)" (p. 639). The techniques factors rely on ESTs.

While most of the criticisms of the EST philosophy and approach have been from those representing more traditional psychotherapy and those with less empirical support at this point, the criticisms of the EBP movement also have come from those with stronger scientific orientations. For example, concern was expressed that putting clinical expertise on a par with scientific evidence (in the three-legged-stool metaphor) implies that they are equally weighted and thus diminishes a reliance on empirically supported therapies. In contrast, in the more recent approach of the EST movement emphasizing flexibility in application of a treatment, the clinician's developed expertise determines how to adapt the scientifically based literature to the specific patient's needs. Additionally, EST proponents argue that knowing through scientific validation which therapies work with which types of clients under what conditions is an important and essential element of competent and ethical treatment of humans who are experiencing problems.

## CONCLUDING REMARKS

The controversies surrounding ESTs and the recent emergence of EBP as overarching, even if imprecise, conceptualizations will likely continue. A growing and dynamic profession requires continual examination and reassessment of itself. The ESTs and EBP movement might have united some aspects of the field but to some degree appears also to have further divided the already noticeable gap between research and practice. Additionally, as noted, a critical consideration will be how information on effective practice is disseminated and successfully implemented. True to the model of integration of science-practice noted earlier, practitioners, clinical researchers, and policy makers will need to work together to create the next generation of treatments that rely on the science of behavior (Weisz et al., 2004).

A new research agenda needs development to innovate and evaluate education and training practices. Traditional modalities such as CE workshops and short courses may not be the most useful. Computer and Web-based information may seem more “cutting edge,” but these resources have not been sufficiently evaluated (and indeed may suffer the same limitations of implementation following exposure in CE workshops). This dissemination and adoption research must parallel renewed efforts to empirically evaluate all of the components in EBP and their integration into successful conceptualizations. The children, adolescents, and their families treated by mental health providers deserve the most effective services possible. The profession and society can only hope that the current state of affairs is but a way-station on a journey to better practice in psychology.

## REFERENCES

- Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The evidence-based practice attitude scale (EBPAS). *Mental Health Services Research, 6*, 61–74.
- Addis, M. E., & Krasnow, A. D. (2000). A national survey of practicing psychologists' attitudes toward psychotherapy treatment manuals. *Journal of Consulting and Clinical Psychology, 68*, 331–339.
- American Psychological Association Task Force on Evidence-Based Practice (2006). Evidence-based practice in psychology. *American Psychologist, 61*, 271–285.
- Abramowitz, J. S. (2006). Toward a functional analytic approach to psychological complex patients: A comment on Ruscio and Holohan (2006). *Clinical Psychology: Science and Practice, 13*, 163–166.
- Blatt, S. J. (2001). The effort to identify empirically supported psychological treatments and its implications for clinical research, practice, and training. *Psychoanalytic Dialogues, 11*, 633–644.
- Beutler, L. E., Castonguay, L. G., & Follette, W. C. (2006). Therapeutic factors in dysphoric disorders. *Journal of Clinical Psychology, 62*, 639–647.
- Beutler, L. E., Moleiro, C., & Talebi, H. (2002). How practitioners can systematically use empirical evidence in treatment selection. *Journal of Clinical Psychology, 58*, 1199–1212.
- Borkovec, T. D. (2002). Training clinic research and the possibility of a National Training Clinics Practice Research Network. *Behavior Therapist, 25*, 98–103.

- Borkovec, T. D. (2004). Research in training clinics and practice research networks: A route to the integration of science and practice. *Clinical Psychology: Science and Practice*, 11, 211–214.
- Brestan, E. V., & Eyberg, S. M. (1998). Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies, 5,272 kids. *Journal of Clinical Child Psychology*, 27, 180–189.
- Calhoun, K. S., Moras, K., Pilkonis, P. A., & Rehm, L. P. (1998). Empirically supported treatments: Implications for training. *Journal of Consulting and Clinical Psychology*, 66, 151–162.
- Castonguay, L. G., & Beutler, L. E. (2006). Principles of therapeutic change: A task force on participants, relationships, and techniques factors. *Journal of Clinical Psychology*, 62, 631–638.
- Chambless, D. L., Baker, M. J., Baucom, D. H., Beutler, L. E., Calhoun, K. S., Crits-Christoph, P., et al. (1996). An update on empirically validated therapies. *Clinical Psychologist*, 49, 5–18.
- Chambless, D. L., Baker, M. J., Baucom, D. H., Beutler, L. E., Calhoun, K. S., Crits-Christoph, P., et al. (1998). Update on empirically validated therapies II. *The Clinical Psychologist*, 51(1), 3–16.
- Chambless, D. L., & Ollendick, T. H. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*, 52, 685–716.
- Chambless, D. L., Sanderson, W. C., Shoham, V., Johnson, S. B., Pope, K. S., Crits-Christoph, P., et al. (1996). An update on empirically validated therapies. *The Clinical Psychologist*, 49(2), 5–18.
- Chorpita, B. F., & Donkervoet, C. (2005). Implementation of the Felix Consent Decree in Hawaii: The impact of policy and practice development efforts on service delivery. In R. G. Steele & M. C. Roberts (Eds.), *Handbook of Mental Health Services for Children, Adolescents, and Families* (pp. 317–332). New York: Kluwer Academic/Plenum Publishers.
- Chorpita, B. F., Yim, L. M., Donkervoet, J. C., Arensdorf, A., Amundsen, M. J., McGee, C., et al. (2002). Toward large-scale implementation of empirically supported treatments for children: A review and observations by the Hawaii Empirical Basis to Services Task Force. *Clinical Psychology: Science and Practice*, 9, 165–190.
- Davison, G. C. (1998). Being bolder with the Boulder model: The challenge of education and training in empirically supported treatments. *Journal of Consulting and Clinical Psychology*, 66, 163–167.
- Doss, A. J., & Weisz, J. R. (2006). Syndrome co-occurrence and treatment outcomes in youth mental health clinics. *Journal of Consulting and Clinical Psychology*, 74, 416–425.
- Eysenck, H. J. (1952). The effects of psychotherapy: An evaluation. *Journal of Consulting Psychology*, 16, 319–324.
- Fonagy, P. (2001). The talking cure in the cross fire of empiricism: The struggle for the hearts and minds of psychoanalytic clinicians: Commentary on paper by Lester Luborsky and Hans H. Strupp. *Psychoanalytic Dialogues*, 11, 647–658.
- Fonagy, P., Target, M., Cottrell, D., Phillips, J., & Kurtz, Z. (2002). *What Works for Whom? A Critical Review of Treatments for Children and Adolescents*. New York: Guilford.
- Goldfried, M. R., & Wolfe, B. E. (1996). Psychotherapy practice and research: Repairing a strained relationship. *American Psychologist*, 51, 1007–1016.
- Havik, O. E., & Vandenbos, G. R. (1996). Limitations of manualized psychotherapy for everyday practice. *Clinical Psychology: Science and Practice*, 3, 264–267.
- Herschell, A. D., McNeil, C. B., & McNeil, D. W. (2004). Clinical child psychology's progress in disseminating empirically supported treatments. *Clinical Psychology: Science and Practice*, 11, 267–288.
- Hibbs, E. D., & Jensen, P. S. (Eds.) (2005). *Psychosocial Treatments for Child and Adolescent Disorders: Empirically Based Strategies for Clinical Practice*, 2nd ed. Washington, DC: American Psychological Association.
- Holden, E. W., Deichmann, M. M., & Levy, J. D. (1999). Empirically supported treatments in pediatric psychology: Recurrent pediatric headache. *Journal of Pediatric Psychology*, 24, 91–109.



- Institute of Medicine (2001). *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academies Press.
- Janicke, D. M., & Finney, J. W. (1999). Empirically supported treatments in pediatric psychology: Recurrent abdominal pain. *Journal of Pediatric Psychology*, 24, 115–128.
- Jelalian, E., & Saelens, B. E. (1999). Empirically supported treatments in pediatric psychology: Pediatric obesity. *Journal of Pediatric Psychology*, 24, 223–248.
- Jensen, P. S., Weersing, R., Hoagwood, K. E., & Goldman, E. (2005). What is the evidence for evidence-based treatments? A hard look at our soft underbelly. *Mental Health Services Research*, 7, 53–74.
- Karekla, M., Lundgren, J. D., & Forsyth, J. P. (2004). A survey of graduate training in empirically supported and manualized treatments: A preliminary report. *Cognitive and Behavioral Practice*, 11, 230–242.
- Kaslow, N. J., & Thompson, M. P. (1998). Applying the criteria for empirically supported treatments to studies of psychosocial interventions for child and adolescent depression. *Journal of Clinical Child Psychology*, 27, 146–155.
- Kazdin, A. E., & Kendall, P. C. (1998). Current progress and future plans for developing effective treatments: Comments and perspectives. *Journal of Clinical Child Psychology*, 27, 217–226.
- Kazdin, A. E., & Weisz, J. R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66, 19–36.
- Kazdin, A. E., & Whitley, M. K. (2006). Comorbidity, case complexity, and effects of evidence-based treatment for children referred for disruptive behavior. *Journal of Consulting and Clinical Psychology*, 74, 455–467.
- Kendall, P., & Beidas, R. (2007). Smoothing the trail for dissemination of evidence-based practices for youth: Flexibility within fidelity. *Professional Psychology: Research and Practice*, 38, 13–20.
- Kerwin, M. E. (1999). Empirically supported treatments in pediatric psychology: Severe feeding problems. *Journal of Pediatric Psychology*, 24, 193–214.
- Levitt, E. E. (1957). The results of psychotherapy with children: An evaluation. *Journal of Consulting Psychology*, 32, 286–289.
- Levitt, E. E. (1963). Psychotherapy with children: A further evaluation. *Behavior Research and Therapy*, 60, 326–329.
- Lonigan, C. J., Elbert, J. C., & Johnson, S. B. (1998). Empirically supported psychosocial interventions for children: An overview. *Journal of Clinical Child Psychology*, 27, 138–145.
- Luborski, L. (2001). The meaning of empirically supported treatment research for psychoanalytic and other long-term therapies. *Psychoanalytic Dialogues*, 11, 583–604.
- McCrady, B. S. (2000). Alcohol use disorders and the Division 12 Task Force of the American Psychological Association. *Psychology of Addictive Behaviors*, 14, 267–276.
- McGrath, M. L., Mellon, M. W., & Murphy, L. (2000). Empirically supported treatments in pediatric psychology: Constipation and encopresis. *Journal of Pediatric Psychology*, 25, 225–254.
- McQuaid, E. L., & Nassau, J. H. (1999). Empirically supported treatments of disease-related symptoms in pediatric psychology: Asthma, diabetes, and cancer. *Journal of Pediatric Psychology*, 24, 305–328.
- Mellon, M. W., & McGrath, M. L. (2000). Empirically supported treatments in pediatric psychology: Nocturnal enuresis. *Journal of Pediatric Psychology*, 25, 193–214.
- Messer, S. B. (2004). Evidence-based practice: Beyond empirically supported treatments. *Professional Psychology: Research and Practice*, 35, 580–588.
- Mindell, J. A. (1999). Empirically supported treatments in pediatric psychology: Bedtime refusal and night wakings in young children. *Journal of Pediatric Psychology*, 24, 465–481.
- Mussell, M. P., Crosby, R. D., Crow, S. J., Knopke, A. J., Peterson, C. B., Wonderlich, S. A., & Mitchell, J. E. (2000). Utilization of empirically supported psychotherapy treatments for individuals with eating disorders: A survey of psychologists. *International Journal of Eating Disorders*, 27, 230–237.
- National Institute of Mental Health (National Advisory Mental Health Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment) (2001). *Blueprint*