

Evidence-Based Practice in Child and Adolescent Disorders

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The purpose of this chapter is to provide an overview of evidence-based practices (EBPs) for use with children and adolescents. We seek to address big picture issues about the use and implementation of EBPs with children and adolescents, with a special emphasis on key challenges that remain to be addressed. We will not address specific disorders or treatments; these will be the topic of subsequent chapters. We begin with a brief summary of the development of EBPs in youth.

A BRIEF HISTORY OF IDENTIFYING EVIDENCE-BASED PRACTICES FOR YOUTH

Over the past two decades, there has been a concerted effort to identify evidence-based practices (EBPs) for use with children and adolescents. The origins of this work has a long history but seems to have gained increased momentum in the early 1990s for several reasons (Lonigan, Elbert, & Johnson, 1998). First, the American Psychological Association (APA) produced a report that, among other things, listed several empirically supported psychosocial treatments (Task Force on Promotion and Dissemination Psychological Procedures,

1995). Although some of the interventions described in the report targeted children and adolescents, the report did not compile a comprehensive list of such interventions. Second, both traditional (Kazdin, 1991) and meta-analytic reviews (Weisz, Weiss, & Donenberg, 1992; Weisz, Weiss, Han, Granger, & Morton, 1995) found that interventions for children and youth with mental health problems were generally effective; however, these reviews were rather global, evaluating interventions as a whole rather than seeking to identify specific interventions that were effective for specific types of problems. Third, health insurance companies were moving toward managed care. As part of this process, services were scrutinized more carefully before being approved for coverage or reimbursement. Fourth, professional organizations and government agencies began developing practice guidelines for psychological interventions (American Academy of Child and Adolescent Psychiatry, 1997, 2007; American Psychological Association Working Group on Psychoactive Medications for Children and Adolescents, 2006), much the same way that practice guidelines have been developed for other professions.

One outcome of these factors was that the Clinical Child Psychology section of the

Clinical Psychology division of the APA formed a task force to identify empirically supported interventions for children and adolescents (Lonigan et al., 1998). The task force developed criteria for evaluating the evidence base (see Mudford, McNeill, Walton, & Phillips, Chapter 1 of this book), and these were published in 1998 in a special issue of the *Journal of Clinical Child Psychology*, which has since been renamed the *Journal of Clinical Child and Adolescent Psychology*. Included in the special issue were articles that applied the EBP criteria to select disorders of childhood and adolescence, including depression (Kaslow & Thompson, 1998), anxiety and phobias (Ollendick & King, 1998), autism (Rogers, 1998), conduct problems (Brestan & Eyberg, 1998), and attention-deficit/hyperactivity disorder (Pelham, Wheeler, & Chronis, 1998), along with articles that talked more conceptually about the application of EBPs to youth (Kazdin & Kendall, 1998; Weisz & Hawley, 1998).

The original articles were recently updated to incorporate research conducted in the decade since the original reviews and the resulting manuscripts were published in a special issue of the *Journal of Clinical Child and Adolescent Psychology* (David-Ferdon & Kaslow, 2008; Eyberg, Nelson, & Boggs, 2008; Pelham & Fabiano, 2008; Rogers & Vismara, 2008; Silverman, Pina, & Viswesvaran, 2008). Also included in the 2008 special edition were reviews of treatments for disorders not included in the 1998 special edition. These included reviews of treatments for eating disorders and eating problems (Keel & Haedt, 2008), obsessive-compulsive disorder (Barrett, Farrell, Pina, Peris, & Piacentini, 2008), exposure to traumatic events (Silverman, Pina et al., 2008), and adolescent substance abuse (Waldron & Turner, 2008), as well as a chapter reviewing EBPs for minority youth (Huey & Polo, 2008).

These special issues represent a remarkable achievement. The considerable financial costs invested by the APA and personal efforts expended by the authors have effectively

consolidated a large body of research into a useable format. The efforts seem to have had considerable impact as evidenced by the fact that the original articles were cited more than 1,100 times in less than a decade (Silverman & Hinshaw, 2008). Likewise, school psychology (Kratochwill & Shernoff, 2003; Kratochwill & Stoiber, 2002) and pediatric psychology (Holden, Deichmann, & Levy, 1999; Janicke & Finnev, 1999; Jelalian & Saelens, 1999; Kerwin, 1999; Powers, 1999; Walco, Sterling, Conte, & Engel, 1999) seem to have followed the lead of clinical psychology and begun their own efforts to identify EBPs. It is clear that considerable progress has been made toward identifying EBPs for child and adolescent mental health problems. This progress provides a solid foundation for future efforts at improving EBPs for children and adolescents.

WHAT DO WE KNOW ABOUT EBPs FOR YOUTH?

Evidence-based practices have typically been organized and evaluated according to diagnosis, as shown in the subsequent chapters of this book. However, when examined across diagnoses it becomes clear that there are several common features of EBPs (Pelham & Burrows-MacLean, 2005). The first common feature of EBPs for youth is that they are extensively studied, procedures are described in treatment manuals, and the treatments or treatment components are often included in intervention guidelines published by professional organizations. This may seem obvious considering that these features are in some sense part of the definition of EBPs, but it is a useful point to highlight because these features are part of the advantages of EBPs. The importance of these features becomes clear when one considers their alternative—interventions without systematic or clearly defined procedures, lacking an evidence base, and without expert guidance or recommendation.

Second, all current EBPs for youth rely on reinforcement programs to strengthen children's appropriate behavior (Pelham & Burrows-MacLean, 2005). Reinforcement is used both during treatment sessions in which children are being taught new skills and in the home and school settings where the new skills are designed to be used. Even when the EBP is a child-based intervention, such as treatment for depression or anxiety or OCD, reinforcement programs are employed to motivate behavior during the treatment session and afterward in the child's natural environment.

Third, unlike more traditional forms of therapy, EBPs for youth typically involve parents, teachers, or both as the agents of change. For instance, all EBPs for youth include a component in which parents are taught skills that, if used, would help reduce or eliminate their child's problems and would help promote their child's positive, adaptive skills. The reason parents and teachers are included in EBPs for youth is because they are collectively in the child's environment almost all the time and this is the setting where the behaviors that result in referrals for treatment occur. In contrast, a therapist typically sees the child about 50 minutes once a week.

Fourth, all current EBPs for mental health problems in youth are behavioral or cognitive-behavioral interventions with components that are directly tied to targeted behaviors or goals of treatment. More specifically, current EBPs for youth typically employ a functional analytic framework to develop, monitor, and modify the treatment in which the therapist and parents or teachers carefully defines the child's treatment goals (target behaviors). Data are collected to evaluate progress toward achieving the treatment goals, and treatment is modified as necessary on the basis of the data collected.

The final common component of EBPs for youth is that they typically include specific procedures designed to facilitate generalization across settings and maintenance across time of any gains the youth has made as the

result of treatment. For example, if treatment has resulted in a child with oppositional defiant disorder having higher compliance with parental commands, then therapists in collaboration with the parents may begin to work on teaching other adults in the child's life (e.g., teachers, grandparents, coaches, babysitters, day care workers, etc.) to employ the same strategies. Therapists and parents may also develop procedures for continuing to systematically monitor the child's behavior and their own behavior to ensure that neither party begins to regress once treatment is stopped, and to plan steps that will be taken if regression does occur. For example, if a child has improved at school as a result of treatment, the parent, teacher, and therapist may plan to meet at the end of the school year to develop a plan for establishing the same effective procedures with the next year's teacher.

WHAT DO WE STILL NEED TO KNOW ABOUT EBPs FOR YOUTH?

The list of potential factors that could influence EBPs is long and research that systematically examines these factors is relatively modest. It is not surprising, then, that numerous important questions about EBPs for youth remain largely unaddressed. We do not intend to produce a comprehensive list of key issues that could be addressed to better understand EBPs for youth; it would be nearly impossible to do so. Instead, we discuss issues that we feel are among the most important.

First, the scope of potential treatments to be evaluated is large, and one important issue is determining which treatments should be among those that are next examined. Currently, the treatments that are examined are, largely, those that individual researchers or teams of researchers have elected to evaluate. More recently, larger scale projects, consisting of multisite teams of researchers, have been developed to evaluate prevention and treatment approaches (Conduct Problems

Prevention Research Group, 2002; Kendall, 2008; MTA Cooperative Group, 1999a; Treatment for Adolescents with Depression Study [TADS] Team, 2004). Collectively, these approaches have produced a high volume of quality research that has answered very important questions; however, an important drawback of this approach is that the treatments selected for evaluation have largely been those developed in carefully controlled settings, typically university or medical school settings. Further, these interventions are typically implemented as an intensive treatment package, with all children receiving the entire package regardless of reasons for referral so that the combination of treatments evaluated in research may differ from the treatments that are used in clinical practice. In fact, both quantitative and qualitative reviews suggest that researchers have focused on evaluating behavioral and cognitive behavioral treatments, whereas surveys of clinicians in practice show that they tend to use other treatments with equal or greater frequency as behavioral and cognitive behavioral treatments (Kazdin, Bass, Ayers, & Rodgers, 1990; Kazdin, Siegel, & Bass, 1990; Weisz, Jensen-Doss, & Hawley, 2006; Weisz, Jensen, & McLeod, 2005). As a result, many of the treatments that are routinely used in clinical practice have not been subjected to empirical evaluation. Thus, one key task for furthering knowledge of EBPs is to broaden the scope of research to include an evaluation of the treatments that are actually being used in clinical practice.

In the same vein, a second key issue is to broaden how treatments are described with respect to their evidence base. Considerable efforts have been made toward elucidating criteria for evaluating when a treatment is effective or probably effective (Lonigan et al., 1998). Criteria have also been suggested for evaluating possibly efficacious and experimental treatments (Silverman, Ortiz et al., 2008). However, these efforts focus on using evidence to decide that a treatment works; little effort has been made toward using

evidence to determine that a treatment does not work. As a number of authors have noted, describing a treatment as evidenced based does not imply that other treatments are ineffective (Kazdin & Kendall, 1998; Lonigan et al., 1998). In fact it is likely, perhaps inevitable, that many treatments that are not currently on the list of EBPs will eventually make their way onto the list as the research base builds up. On the other hand, some treatments are not likely to be effective regardless of how much research evaluates them. One important question about EBPs, then, is whether greater distinction should be made among those treatments that do not meet criteria for being evidenced based. Specifically, it seems necessary to distinguish treatments that have been evaluated and shown to be ineffective—that is, invalid treatments—and treatments that have never been evaluated. Distinguishing examined from unexamined treatments and treatments that have been examined and shown to be invalid is important because the ethics of delivering treatments that have not been evaluated is unclear, whereas it is clearly unethical to deliver treatments that have shown to be invalid (Kinscherff, 1999; Ollendick & Davis, 2004; Rae & Fournier, 2008). Further, if one goal of the EBP movement is to promote use of effective strategies for improving mental health in children and adolescents, then identifying treatments that are shown to be invalid, based on methodologically sound, replicable research, would provide parents, teachers, and policymakers clear information for making informed decisions about treatment (Hoagwood, Burns, Kiser, Ringseisen, & Schoenwald, 2001; Weisz & Hawley, 1998). Making this distinction among non-EBP treatments is feasible. As an example, Waschbusch and Hill (2003) reviewed alternative treatments of ADHD by classifying them into empirically supported, promising, ineffective, and not researched. Likewise, in a comprehensive review of the efficacy and effectiveness of the most common child and adolescent mental health problems,

the Hawaii Empirical Basis to Service Task Force classified interventions as well-established, probably efficacious, possibly efficacious, unsupported, and possibly harmful (Chorpita et al., 2002). These examples show that it is feasible to further distinguish among treatments that do not meet criteria as an EBP, and it seems important to do so.

Third, much more needs to be learned about the influence of developmental factors on EBPs (Vernberg, 1998). Considering the effects of development processes when evaluating psychopathology is one of the hallmarks of modern research on mental health in children, as evidenced by the rise of developmental psychopathology as a field of study (Cicchetti & Richters, 1997; Sroufe, 1990; Sroufe & Rutter, 1984). Applying a developmental frame to EBPs suggests that practices that are supported at one age may not be supported at another. For instance, an evidence-based assessment or intervention for depression in adolescents may not be appropriate for assessing and treating depression in children (Hoagwood et al., 2001). Surprisingly little is currently known about developmental effects in EBPs. This may be, in part, because treatments for children and adolescents have historically been adapted from treatments used with adults, with little attention paid to developmental differences within childhood or within adolescence (American Psychological Association Working Group on Psychoactive Medications for Children and Adolescents, 2006). The research that has been done on developmental differences in EBPs provides inconsistent findings. For example, most research suggests that parent interventions produce statistically significant positive gains in preschool, elementary school, and adolescent age youth (Eyberg et al., 2008), but this is somewhat qualified by other research suggesting that parents of younger children may be less likely to drop out of treatment early than older youth (Dishion & Patterson, 1992) and that older youth may be less likely to

make clinically significant improvements in response to parent interventions (Ruma, Burke, & Thompson, 1996). Mixed evidence has also emerged about the role of age in cognitive behavior therapies, with some evidence suggesting that older children show more benefit to cognitive behavioral treatment (Durlak, Fuhrman, & Lampman, 1991) and other evidence finding the opposite pattern (Southam-Gerow, Kendall, & Weersing, 2001).

Applying a developmental framework to understand EBPs means more than simply evaluating whether EBPs differ as a function of age. Rather, one must also consider the context of childhood and adolescence. Unlike providing EBPs to adults, where an individual is typically the sole target of intervention, providing EBPs to children and adolescents almost certainly will involve both the individual child/adolescent as well as their family and often their school (Hoagwood et al., 2001). In fact, the majority of mental health services for children are provided by schools (Burns et al., 1995). Likewise, nearly all aspects of treatment provided to children will require some parental involvement—parents typically identify and refer children for treatment, assessments typically rely heavily on the parent's perception (e.g., through a clinical interview or rating scale about the child), and treatment is often delivered through the parent (e.g., parent training). Family context also likely interacts with age in terms of their impact on EBPs. For instance, research suggesting that adolescents may have lower rates of clinically significant improvement in response to parent training for antisocial behavior (Ruma et al., 1996) could be at least partly due to the fact that parents of adolescents are typically less likely or less able to monitor them. Gaining a better understanding how development and EBPs interact is fundamental to understanding how to best serve children and adolescents.

Fourth, more needs to be learned about the role of gender in EBPs. As with age, evidence published to date provides mixed

evidence about gender differences in response to EBPs. In one meta-analytic review of treatment studies targeting youth, Weisz, Weiss et al. (1995) found higher effect sizes (more positive response to treatment) in studies that used primarily female samples as compared to studies that used primarily male samples. There was also an interaction with age that suggested adolescent females showed the most positive response to treatment; however, these results contradicted findings of an earlier meta-analysis conducted by the same investigators that found no difference in treatment outcome between boys and girls (Weisz, Weiss, Alicka, & Klotz, 1987). More work to resolve these discrepant findings is needed.

Fifth, there is limited information about the processes that mediate EBPs. Nearly all research on EBPs has focused on outcomes, while little attention has been paid to the processes that produce those outcomes. Much more is known about what the treatments do (outcomes) than how the treatments work (the mediators). One likely reason is that theories supporting EBPs are often disconnected from research evaluating EBPs. As described by Kazdin (2001, p. 59),

there is little in the way of theory that underlies current therapies for children and adolescents. We are in an odd position of having no clear understanding of therapeutic change, no clear set of studies that advance our understanding of why treatment works, and scores of outcome studies that are at the same time wonderfully but also crassly empirical.

Procedures for testing mediation have been clearly described (Baron & Kenny, 1986; Holmbeck, 1997), including procedures for doing so in treatment outcome studies (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001; Kraemer, Wilson, Fairburn, & Agras, 2002). Applying these methods to evaluating EBPs will help to identify the “active ingredient” in treatments, which in turn will provide greater insight into why treatments do and do not work. In turn, this will help develop and refine EBPs to make them more effective (Weisz et al., 2005).

Sixth, the role of comorbidity on EBPs is under-studied (Shirk & McMakin, 2008). It has long been demonstrated that comorbidity is often the rule rather than the exception in samples of children with mental health problems, and this is especially true in samples of children referred for treatment (Angold, Costello, & Erkanli, 1999). Despite this established finding, relatively little research has examined the role of comorbidity in prevention or treatment efforts (Weisz et al., 2005). In fact, it is widely believed that researchers sometimes exclude children with comorbid disorders from intervention research in an effort to produce a homogeneous sample and this produces a mismatch between children seen in community treatment settings—who typically have high rates of comorbidity—and children included in clinical treatment research. Bickman (2002), for example, suggests that approximately 50% of children identified in and treated in community clinics have comorbid disorders, whereas almost all EBPs are designed for specific disorders without regard to comorbid conditions. Because comorbidity is often associated with more severe forms of psychopathology (Brady & Kendall, 1992; Loeber & Keenan, 1994; Seligman & Ollendick, 1998; Waschbusch, 2002), it is tempting to assume that comorbid conditions are likely associated with a diminished response to EBPs; however, research suggests a more complex pattern (Hinshaw, 2007). In fact, some research suggests that the presence of a second disorder may potentiate the response to treatment. For instance, some evidence suggests that children with ADHD and comorbid conduct problems show a less positive response to medication treatment than do children with ADHD who do not have conduct problems (Barkley, McMurray, Edelbrock, & Robbins, 1989), whereas other research shows the opposite pattern—that children with both ADHD and conduct problems show a better treatment outcome in response to behavioral parent training (Hartman, Stage, & Webster-Stratton,

2003). Still other research suggests no impact of comorbid conduct problems for either medication or behavior therapy treatment (e.g., MTA Cooperative Group, 1999b; Pelham et al., 1993). These contrasting findings illustrate that the impact of comorbidity on EBPs is likely to be complex and influenced by factors such as the nature of the primary disorder and the comorbid disorder, as well as the type of EBP.

Seventh, little is known about the sequencing and integration of EBPs. There is almost no research guidance about which treatments should be used when there is more than one EBP available, and there is almost no research guidance on how to proceed when more than one mental health problem is present and therefore more than one EBP may be needed (Chorpita et al., 2002; Pelham & Fabiano, 2008). Gaining a better understanding of how to sequence and integrate EBPs is important for at least three reasons. First, EBPs tend to be specific to one particular problem area, but children and adolescents who present for treatment often do not present with just one problem. For children and adolescents with more than one mental health problem, it is left to the clinician to determine which problem should be prioritized and therefore how EBPs should be sequenced, or if problems should be tackled simultaneously and the EBPs should be integrated. Regardless of what route the clinician chooses, there is almost no research on how to proceed (i.e., which EBP should come first or how to integrate two different EBPs). Second, integrating and sequencing EBPs is common practice in clinical settings. One survey of practitioners found that eclectic therapy, which can be defined as treatment that uses techniques drawn from different therapeutic orientations, was the most widely used treatment approach by both psychologist and psychiatrists in clinical practice (Kazdin, Siegel et al., 1990). Third, evidence suggests that how treatments are sequenced and integrated can change the nature of the treatments. It is often assumed that combining two treatments

will result in additive effects in that the effects of one treatment will be added to the effects of the other treatment; however, this is just one possible way treatments could combine (Pelham & Murphy, 1986; Schroeder, Lewis, & Lipton, 1983). Treatments could also combine to potentiate one another, yielding a combined effect greater than the total of the two component effects, or they could inhibit one another, yielding an effect that is less than the effect of either component. Reciprocation can also occur in which combining two treatments results in the same outcome as either treatment alone. Likewise, sequencing may also alter treatment outcomes. For example, some treatment guidelines published by professional organizations recommend stimulant medication as the first-line treatment for children with ADHD, with behavior therapy implemented later if needed (American Academy of Child and Adolescent Psychiatry, 2007; American Academy of Pediatrics, 2001). Yet the only published study that has systematically examined the sequence of implementing these two evidence-based treatments for ADHD—stimulant medication and behavior therapy—found that 82% of children who were started on stimulant medication were later judged to need additional behavior therapy, whereas only 26% of children who were started on behavior therapy were later judged to need stimulant medication (Dopfner et al., 2004). Likewise, research we recently completed showed that parents of children with ADHD were much less likely to attend parent training if their child was first treated with stimulant medication as compared to if their child was first treated with behavior therapy (Pelham, Fabiano, & Waschbusch, 2009). Clearly, gaining further knowledge of sequencing and integrating treatments has the potential for improving knowledge of how to effectively implement EBPs.

Finally, and perhaps most importantly, much more needs to be learned about how to implement EBPs in real life settings. Researchers have long distinguished between efficacy and effectiveness research. Briefly,

efficacy studies are those that seek to evaluate internal validity by examining intervention effects under ideal conditions, whereas effectiveness studies seek to examine clinical utility by examining intervention effects under typical treatment conditions (Chorpita, Barlow, Albano, & Daleiden, 1998; Hoagwood, Hibbs, Brent, & Jensen, 1995). Currently, efficacy research forms the backbone of efforts to evaluate the evidence base of child and adolescent interventions (Lonigan et al., 1998). There are numerous differences between efficacy and effectiveness studies. Prototypically, efficacy studies examine treatment effects on clients who are carefully selected to meet a specific profile and using carefully selected therapists who are trained to implement treatment in a carefully defined and controlled manner. In contrast, the prototypical effectiveness study examines treatment effects on clients who present for services using a treatment as implemented by therapists who work at the service agency and who implement the protocol in variable ways.

Given these differences, it is no wonder that treatment effects often vary considerably when implemented under ideal conditions (in efficacy studies) as compared to when implemented in clinical practice (in effectiveness studies). Several reviews, including meta-analyses, have examined the effects of interventions for children and adolescents as evaluated using efficacy studies and these reviews consistently report moderate to large positive effects (Hoag & Burlingame, 1997; Kazdin, 1991; Weisz et al., 1987; Weisz, Weiss et al., 1995). In contrast, meta-analytic reviews of treatment as delivered in typical clinical practice (effectiveness studies) suggests that they are no more effective than control conditions (Weisz & Hawley, 1998; Weisz et al., 2006; Weisz, Weiss, et al., 1995). More recent evidence is consistent with these findings. For instance, one recent randomized clinical trial showed that traditional psychotherapy as delivered in clinical practice was no more effective than a nontreatment control

condition both immediately after treatment (B. Weiss, Catron, Harris, & Phung, 1999) and 2 years later (B. Weiss et al., 1999). Likewise, a recent meta-analysis reviewed studies in which youth were randomly assigned to treatment with an EBP or to treatment with typical clinical practice and found that the EBP outcomes were superior to outcomes associated with typical clinical practice both immediately after treatment as well as at follow-up (Weisz et al., 2006). The effect sizes comparing EBP and typical clinical treatment were 0.30 at posttreatment and 0.38 at follow-up, indicating that, on average, 62% of youth treated with EBPs were better off than youth who were treated with usual clinical care. These findings suggest that EBPs produce more positive outcomes than usual clinical practice. As one author stated, “the literature on effectiveness of treatment as usual in the community for children and adolescents is depressingly consistent in its poor outcomes” (Bickman, 2002, p. 195). It should be noted that this and other conclusions about the seeming ineffectiveness of community-based treatment are based on average outcomes computed across studies. By their nature averages hide the considerable variation that was apparent from study to study. In fact, some studies show that EBPs have large advantages over typical clinical care, other studies show no differences, and still other studies find that usual care has advantages over EBPs. It would therefore be incorrect to conclude that all typical clinical practices are inferior to all EBPs; instead, the results suggests that, on average, EBPs seem to have advantages over typical clinical care.

It should also be emphasized that there are many differences between EBPs and usual clinical care. Treatments delivered as part of research typically have careful evaluation of the fidelity of the implementation, whereas treatments delivered in usual practice typically do not. Fidelity evaluations have been shown to be an important determinant of treatment effects (Cordray & Pion, 2006). Further, research on

treatment of mental health problems for youth often use samples selected to be homogenous and use carefully controlled treatment conditions (e.g., low caseloads for therapists who specialize in a particular disorder), whereas treatments delivered in community settings serve heterogeneous populations and treatment conditions are not carefully controlled (e.g., patients with highly diverse presenting problems, clinicians with high caseloads and varying levels of education and expertise, treatment provided in various settings) (Weisz, Donenberg, Han, & Kauneckis, 1995). The fact that researchers are apparently evaluating different treatments, clients, and therapists than what is found in typical clinical settings (Kazdin, Bass et al., 1990), and using more rigorous methods of determining whether treatment is being implemented as designed (i.e., conducting fidelity evaluations), raises an important question: To what extent are mental health professionals using EBPs in real life settings?

USE OF EBPs IN REAL LIFE SETTINGS

It should be obvious that EBPs will not have a meaningful, positive impact on children with mental health problems if they are not used by practitioners that provide treatment (Gonzales, 2002). As Hoagwood and colleagues wrote, "Treatments that fail to reach those who stand to benefit from them cannot be said to be effective" (Hoagwood et al., 2001, p. 1182). An important question, then, concerns the extent to which EBPs are actually used in real life settings. The general consensus among researchers seems to be that EBPs are not widely used in clinical practice. As stated in one recent book chapter, "Despite the outpouring of research on psychotherapy over the past half century, by and large, the clinical activities of most psychotherapists remain largely untouched by findings of empirical research" (Nathan & Gorman, 2002, p. 643). What evidence supports this assertion?

One line of evidence comes from work by Kazdin and colleagues. In one study, these researchers surveyed over 1,100 practitioners providing services to children with mental health problems about the services they provide, their attitudes toward different treatments, and their priorities about treatment research (Kazdin, Siegel, et al., 1990). In a second study, the authors evaluated the characteristics of research on the treatment of child and adolescent mental health (Kazdin, Bass, et al., 1990). Comparing the two studies suggests that there are important differences between what researchers are studying and what practitioners are encountering and doing in practice. Results of the survey of practitioners showed that eclectic treatments were rated by 72.6% of respondents as effective most of the time or all of the time, whereas behavior modification was rated as effective by 55.1% of respondents and cognitive treatments were rated as effective by 49.2% of respondents. In contrast, the survey of treatment research showed that the majority of studies have examined behavior treatments (49.5%) or cognitive behavioral techniques (22.1%); only 3.6% of research has examined eclectic treatments. Likewise, adjustment disorder was the fourth most common problem that professionals reported treating, whereas virtually no treatment research has examined adjustment disorders. O'Connor and Cartwright's chapter on adjustment disorders in adults in Volume 2 of this handbook confirms that impression. Taken together, these findings suggest an important disconnect between treatment research and treatment use.

More recently, Plante, Andersen, and Boccacini (1999) surveyed 211 clinical psychologists about their attitudes toward and use of EBPs. Most of the respondents described themselves as employed in independent practice and as spending the majority of their professional time providing psychotherapy services. Sixty-five percent of respondents held a generally positive view about EBPs but only 46% routinely used EPBs in their own

practice. Further, correlations showed that those who spent the most time delivering services were least likely to use EBPs.

Surveys of parents and teachers of children with mental health problems also suggest that use of EBPs is not necessarily the norm. Two recent surveys of parents of children with autism spectrum disorders found that parents were using an average of four to seven different treatments for their child and that EBPs and non-EBPs were equally likely to be used (Goin-Kochel, Myers, & Mackintosh, 2007; Green et al., 2006). Likewise, a nationally representative sample of public and private schools whose principals were surveyed about activities for preventing and treating discipline problems showed that only about two thirds of schools were using evidence-based practices (behavioral approaches) for reducing conduct problems in schools (D. C. Gottfredson & Gottfredson, 2002; G. D. Gottfredson & Gottfredson, 2001). By comparison, the same percentage of elementary school principals reported using packaged or “off-the-shelf” programs to prevent conduct problems, almost none which have been evaluated. For instance, the Drug Abuse Resistance Education (DARE) program was used by about half of elementary schools, despite the fact that there is evidence that it is ineffective (Lynam et al., 1999). Overall, these surveys, along with data from mental health service providers, support the assertion that EBPs are not widely used in real life settings—at least relative to treatments without empirical support.

On the other hand, more recent data provides optimism. One recent survey queried 616 individuals about their attitudes toward and use of EBPs (Sheehan, Walrath, & Holden, 2007). The majority of participants (90%) described themselves as direct providers of mental health services and 80% of respondents noted that they used at least one EBP in the course of their work. About one third to one half of employers required service providers to use EBPs, suggesting that the use of EBPs may be increasing in recent years since this survey reported rates

of EBP use that were nearly double those reported by Plante et al. almost a decade earlier. Further, this increase may be due to the practitioners electing to use EBPs rather than due to mandates imposed by the employer.

WHAT DETERMINES WHETHER CLINICIANS USE EBPs?

The relatively low usage of EBPs in clinical practice raises an important question: Why are EBPs not used more often in mental health service settings? One factor that may be relevant is clinician attitudes toward EBPs (Higa & Chorpita, 2008). Theory and research suggest that attitudes can be a significant factor in the decision about whether to pursue or accept innovative change. For example, motivational interviewing seeks to address ambivalence about change in clients seeking treatment and has been shown to be effective for treatment of alcohol and other substance use problems (Rubak, Sandbaek, Lauritzen, & Christiansen, 2005). One recent survey of mental health professionals found considerable variation across the sample on their openness to EBPs and that interns still in training were more open to adopting EBPs than were those already in practice (Aarons, 2004). A related study surveyed practicing clinicians about their use of treatment manuals in clinical practice (Addis & Krasnow, 2000). Because treatment manuals are part of the definition of a well-established EBP (Lonigan et al., 1998; Silverman & Hinshaw, 2008) but seldom used in typical clinical practice (Weisz et al., 2006), clinician attitudes toward treatment manuals are arguably a proxy for their attitudes toward EBPs. Twenty-three percent of clinicians had never heard of a treatment manual. Of those who had, only 6% reported using a treatment manual often or almost always. In contrast, 46% reported never using one. Those who viewed treatment manuals more negatively did so because they conceptualized them as cookbooks and as imposed on them for bureaucratic reasons, suggesting

that lack of flexibility in applying treatments is a barrier to implementing EBPs. This same theme emerged in other recent studies of practicing clinicians (Nelson, Steele, & Mize, 2006; Pagato et al., 2007). None of these studies directly evaluated whether those clinicians with more negative attitudes toward EBPs are less likely to use EBPs, but they are consistent in suggesting that there is wide variation in attitudes and that at least some clinicians view EBPs as unhelpful largely because they believe EBPs consist of a rigid set of treatment rules imposed on them by bureaucrats.

Another, more tangible, reason that EBPs are not more widely used in clinical practice is that they are not required to be used. In contrast to medications, which cannot be prescribed without approval by the Food and Drug Administration, psychosocial treatments are not regulated by governments or by professional organizations. Currently, there is no requirement that clinicians can only provide psychosocial treatments that have an evidence base, nor are their sanctions against providing psychosocial treatments that are untested or that have been shown to be ineffective. The same has been historically true regarding payment for services, though this may be changing. That is, mental health providers have been paid for providing any manner of psychosocial interventions regardless of evidence base; there has been little difference in compensation for services with an empirical base or services without an empirical base. There are many reasons for this, such as lack of agreement as to what constitutes an EBP as well as political considerations within professional organizations, but the likely result of lack of regulation and lack of differential compensation is that there is little incentive for mental health professionals to offer EBPs as compared to other treatments. Further, this lack of a central oversight agency means that consumers have no easily identifiable source for obtaining information on best psychological practices.

Along with a lack of incentive to begin using EBPs, there is also a significant disincentive

for clinicians to seek out EBPs (Weisz et al., 2005). When considering the amount of education that is required of most mental health professionals, even those clinicians who are relatively new in the field have invested considerable time, energy, and often money toward learning and using their current intervention approach. In some cases, adopting an EBP intervention would mean that the payoff for this investment would be diminished. In addition, many clinicians would need to make additional investments in their training if they are to provide EBPs, both in terms of finances to invest in training and in terms of lost revenue while receiving training (Higa & Chorpita, 2008). Further, given the considerable variation observed in treatment outcome research, it is likely that many clinicians have seen at least some success using their current approach. Even if these successful outcomes are more rare than they are common they may act as intermittent reinforcement that serves to maintain the therapists' behaviors (Shirk, 2004). Further, attribution theory and research shows that healthy individuals tend to remember successes more readily than failures (Taylor & Brown, 1988), suggesting that many clinicians will have a positively skewed judgment of their own efforts. This may be especially likely if clinicians do not systematically track their clients' progress or do so using subjective measures (treatment progress notes) rather than objective measures of treatment response (e.g., psychometrically sound rating scales). The net result is that asking clinicians to move toward providing EBPs may essentially equate to asking clinicians to set aside their firsthand experience of successful outcomes in favor of secondhand evidence from a scientific study, and to spend their own time and money to do so.

Another factor that may influence whether professionals use EBPs is consumer demand (Pagato et al., 2007). It has probably always been true that parents who are seeking help for their child or adolescent have difficulty differentiating sound advice from poor advice, but this is likely increased substantially in the

information age. For every professional organization that provides sound information on evidence-based practices there are likely hundreds of websites that post poor information that has little or no evidence base. An Internet search on ADHD treatment, for example, provides over 470,000 Web sites including the second ranked page that decries both EBPs for ADHD (stimulant medication and behavior therapy) while touting treatments (megavitamin and dietary restrictions) that have no empirical support, are costly, and may be dangerous. Further, unlike the medication interventions that are required to have a certain level of empirical support (as regulated by the Food and Drug Administration) and are then marketed (often aggressively) to consumers, there is no industry that is committed to “whipping up demand” for empirically supported psychosocial interventions (Weisz, 2000a, 2000b). The pharmaceutical industry has been very effective at connecting research-based interventions to practitioners and to consumers; no such mechanism is in place for psychosocial interventions.

Finally, many clinicians are skeptical of the foundation and nature of EBPs (Addis, Wade, & Hatgis, 1999; Levant, 2004). One review of studies examining the efficacy and effectiveness of EBPs for children and adolescents concluded that “clinician reluctance remained a primary obstacle to dissemination” (Chorpita et al., 2002, p. 167). Others have endorsed this same conclusion (Kendall, 2002). As noted earlier, many therapists are skeptical of manualized treatments in general and EBPs in particular, viewing them as imposing a “one-size-fits-all” approach onto situations in which individualization and adaptation are necessary strategies (Addis et al., 1999). Others view the research foundation of EBPs with skepticism, criticizing the methodology of the studies (Ablon & Marci, 2004; Goldfried & Eubanks-Carter, 2004; Westen, Novotny, & Thompson-Brenner, 2004) and suggesting that research on EBPs is not generalizable to the setting or clients that the practitioner encounters (Shirk, 2004; Westen et al., 2004). Other concerns

raised are that more evidence is needed before treatments can be widely disseminated, apparently implying that definition of EBPs may be too lax (Kettlewell, 2004).

These concerns are not without merit. For instance, one study compared children with anxiety disorders and their families served in research settings to those served in a community outpatient clinic and found that those from the community setting were more likely to evidence comorbid externalizing problems and were more likely to come from low-income and single-parent homes (Southam-Gerow, Weisz, & Kendall, 2003). As others have noted, these and similar findings reinforce that the concerns of mental health professionals about EBPs have some validity (American Psychological Association Task Force on Evidence-Based Practice for Children and Adolescents, 2008; Hoagwood et al., 2001; Weisz et al., 2005).

In sum, it is not surprising that clinicians are reluctant to use EBPs when one considers how they likely view the situation: (a) There is little tangible benefit and may be a considerable cost to providing them; (b) they have likely seen at least some success with the approach they are currently using; (c) there is no requirement from government, insurance, or professional organizations to provide EBPs; (d) there are few parents and no corporations advocating for EBPs; (e) research suggesting that EBPs are more effective than usual care seems irrelevant in that it uses treatment conditions that may not replicate actual practice and is evaluated using clients that are not like clients in community settings; and (f) the nature of EBPs seems overly restrictive and does not allow for adaptation to meet real life concerns.

HOW SHOULD EBPs BE TRANSPORTED TO CLINICAL SETTINGS?

Given these barriers, how can EBPs be successfully transported beyond university and

medical school settings and into clinical practice? This question concerns dissemination, which can be defined as the process of systematically deploying EBPs into typical practice settings. It is not an exaggeration to assert that this is currently the biggest, most salient challenge facing the EBP movement (American Psychological Association Task Force on Evidence-Based Practice for Children and Adolescents, 2008; Schoenwald & Hoagwood, 2001). Research focusing on implementation and dissemination of EBPs is currently a priority research area for the National Institute of Mental Health with respect to children and adolescents (Hoagwood & Olin, 2002). Despite this priority and the importance of the topic, relatively little research has examined how to disseminate EBPs. Using a search of PsycINFO, Herschell, McNeil, and McNeil (2004) found that only 23% of studies relevant to EBPs that were published between 1995 and 1999 focused on dissemination of treatments. They also reviewed selected journals that focus on treatment studies and found that the number of articles devoted to evaluating and disseminating adult treatments were double the number devoted to child and adolescent treatments.

In contrast to the paucity of research, much has been written on the theory and process of disseminating EBPs (Fixen, Naoom, Blase, Friedman, & Wallace, 2005; Herschell et al., 2004; Schoenwald & Hoagwood, 2001; Weisz et al., 2005). One approach that has been proposed is the Deployment Focused Model (Weisz et al., 2005). The rationale behind the Deployment Focused Model is to

bring treatments into the crucible of clinical practice early in their development and then treat testing in the practice setting as a sequential process . . . to break down the long-standing distinction between clinical trials research and mental health services research. (Weisz et al., 2005, p. 27)

This is accomplished through several steps of treatment development research:

(1) theoretically and clinically guided construction, refinement, and manualizing the intervention protocol; (2) initial efficacy trial under controlled conditions to establish evidence of benefit; (3) single-case applications in practice settings, with progressive adaptations to the protocol; (4) partial effectiveness tests; (5) full tests of effectiveness and dissemination; and (6) tests of sustainability in practice contexts. As is apparent from this description, the goal of the Deployment Focused Model is to conduct the majority of research in community/practice settings. This includes research designed to evaluate: (a) necessary and sufficient components of treatment; (b) moderators and mediators of outcomes; (c) costs and benefits; (d) the impact of organizational factors on treatment outcomes; and (e) variations in treatment procedures, packaging, training, and delivery that are intended to improve the fit with the settings in which it is employed.

An alternative to Weisz's Deployment Focused Model model is offered by Schoenwald and Hoagwood (2001). In a cogent discussion of theoretical and practical issues about moving treatment research into practice settings, these authors argue that there are important distinctions between diffusion, dissemination, and transportability. Diffusion is conceptualized as the natural, unplanned, spontaneous movement of EBPs from research settings into clinical practice. In contrast, dissemination is conceptualized as the directed, planned, organized movement of EBPs from research to practice. Transportability is conceptualized as a precursor to dissemination that focuses on understanding factors associated with successfully moving EBPs from research to practice. Schoenwald and Hoagwood suggest that transportability research is critical to successful dissemination. Thus, Schoenwald and Hoagwood seem to recommend taking more time to understand the EBP before moving toward implementing it in practice settings. This contrast with Weisz's DFM model that seems to recommend moving quickly toward implementing treatments in

practice settings and researching them in that context. Currently, there is no research that compares these two different dissemination models.

These dissemination models provide a useful framework for furthering dissemination research with the ultimate goal of moving EBPs into real life settings; however, a serious drawback for each of these models is that they may take years to produce a knowledge base with sufficient breadth and depth to be helpful. In the absence of this research base, it may be helpful to speculate about factors that may positively impact the uptake of EBPs in clinical practice settings.

First, consumer demand would likely increase uptake of EBPs. If parents, schools, and others who make decision about children's service use were to begin taking their business only to practitioners who provide evidence-based services, the market would likely ensure that evidence-based methods predominate. Toward this end, educating mental health users about what treatments are and are not evidence-based is a crucial component of disseminating EBPs. Currently, many parents likely assume that all treatments are evidence based. When asked whether they felt it is important that the treatment offered to their child have scientific evidence to support its use, one parent we worked with replied, "You mean there are treatments given to kids that don't have scientific support?" This is borne out in sophisticated marketing surveys that show parents clearly prefer clinical information that is based on research evidence (Cunningham et al., 1998).

Second, EBPs would become widely used if they were more appealing to consumers as compared to their non-EBP counterparts. Likewise, practitioners would be more likely to deliver EBPs if they were formulated in ways that they found highly acceptable and even satisfying. Thus, we need to know what treatments are acceptable to clinicians, parents, and children as a step toward increasing the use of EBPs (Bickman, 2002). Treatment acceptability has long been of interest to

mental health researchers (Lebow, 1983) and has traditionally been studied using surveys in which parents or teachers complete questionnaires that ask them to rate various treatments or treatment characteristics (dosReis et al., 2003; Reimers, Wacker, & Koepl, 1987). Studies of this type are useful, but they share several methodological limitations. One limitation is that most questionnaires evaluate treatment as a single package by asking parents or teachers how they feel about the treatment as a whole. However, treatments are complex, with some positive aspects and some negative aspects. More could be learned about parental opinions of treatment by asking them to separately evaluate different aspects of treatments. Another limitation is that respondents are not forced to make difficult choices that are inherent in any decision to pursue a treatment. In a typical paper-and-pencil survey about treatment options, for example, a parent is allowed to answer that she or he would prefer a treatment that is cheap, easy, effective, and carries a low risk for side effects. Such a treatment is indeed highly desirable, but is also not typical of most or any available treatment that has yet been developed. More realistic would be to require parents to make meaningful trade-offs when evaluating treatment options such that they cannot pick all the benefits and none of the drawbacks. In other words, just as a consumer seeking to purchase a television is likely to make trade-offs of factors such as size, cost, quality of picture, and other features, so too are parents likely to make trade-offs of positive and negative treatment factors when deciding what treatment to "buy" for their child or adolescent.

Because of these and other limitations, recent research has turned to methods used by marketing researchers to gain a better understanding of what characteristics of treatment are preferred by parents seeking help for their child. Considering that market researchers have spent literally millions of dollars perfecting methods for measuring consumer preferences and then turning that data into

actions (i.e., getting consumers to buy a product), applying market research methods seems a natural fit for measuring parental preferences for EBPs and turning that data into actions (i.e., getting them to seek EBPs for their child). More specifically, marketing research methods known as discrete choice conjoint experiments (DCE) provide a means of evaluating parental preferences about treatment that: (a) asks about specific aspects of treatment, rather than evaluating treatment as a unitary construct; (b) forces parents to choose among treatment characteristics, just as they do when making other complex choices; and (c) allows for the evaluation of individual differences among respondents (Orme, 2006). In applying DCEs to examine treatment preferences, parents make a series of choices between different treatment attributes presented in context of each other, thereby requiring them to consider the trade-offs associated with competing alternatives. This limits superficial decision making, reduces halo effects, and reduces social desirability biases, thereby providing a better understanding of underlying preferences (Phillips, Johnson, & Maddala, 2002). In other words, by requiring respondents to trade off some treatment characteristics against others, DCEs offer a proxy of how parents make real-world decisions (Payne, Bettman, & Johnson, 1993) and results in data that better predicts actual behavior (Phillips et al., 2002). Although these methods were developed by mathematical psychologists (Luce & Tukey, 1964), marketing researchers adopted them to involve consumers in product and service design (Orme, 2006). These methods have recently been extended to involve patients in health service design (Oudhoff, Timmermans, Knol, Bijnen, & Van der Wal, 2007; Ryan & Farrar, 2000; Ryan & Gerard, 2003; Spoth & Redmond, 1993), explore treatment preferences (Ahmed, Blamires, & Smith, 2008; Dwight-Johnson, Lagomasino, Aisenberg, & Hay, 2004; Fraenkel, Gulanski, & Wittink, 2006; Singh, Cuttler, Shin, Silvers, & Neuhauser, 1998),

model health outcome choices (Ryan, 1999; Stanek, Oates, McGhan, Denofrio, & Loh, 2000), study clinical decisions (McGregor, Harris, Furuno, Bradham, & Perencevich, 2007), and involve students in design of medical education programs (Cunningham, Deal, Neville, Rimas, & Lohfeld, 2006).

There is also evidence that they may be useful in understanding parental preferences for treatment of children's mental health. A recent study used a DCE to examine the preferences of parents seeking mental health services for children ages 6 to 18 years old (Cunningham et al., 2008). Nearly 1,200 parents who were self-referred to outpatient mental health clinics for their child's problems completed choice tasks designed to evaluate their opinions about the content and method of treatment, and about the importance of different outcomes with respect to their child's treatment. Latent class analyses of their responses showed that parents could be divided into three categories. Parents in the Action group, which represented about 43% of respondents, preferred treatment materials that provided step-by-step solutions for their child's mental health problems, along with weekly meetings with other parents and coaching calls from a therapist. Parents in the Information group, which represented 41% of respondents, preferred treatment materials that provided them information about their child's mental health problem, but they were not interested in materials that would help them solve their child's problem. These parents were also more likely to state that logistical factors were important, such as where treatment was held, the time required to participate in treatment, and how treatment would be delivered (with other parents in a group, through a book, with a therapist, etc.). Parents in the Overwhelmed group, which represented 16% of respondents, reported higher conduct problems in their children, were more depressed themselves, and felt their child had a worse impact on their family. Even so, they were less interested in receiving information

about their child's problem or about solving their child's problems.

This study indicates that there are important differences between parents who seek help in outpatient settings. It may be possible to deliver EBPs in different ways depending on the parents' opinions about their child's treatment, thereby making their child's treatment more acceptable to them. For instance, parent training is consistently demonstrated to be an empirically supported treatment in research settings (Chorpita et al., 2002; Eyberg et al., 2008), but most parents in community settings drop out before completing treatment (Kazdin, 1996). It may be that parents in the Action group are ready, willing, and eager to receive parent training as traditionally delivered in EBP efficacy studies, whereas parents in the Information group are willing to listen but need a motivational interviewing type intervention first, and parents in the Overwhelmed group need therapy for their own depression before they are ready to even consider addressing their child's difficulties. These possibilities are simply speculations based on one study, but they illustrate the potential for using marketing research techniques to help tailor EBPs to be delivered in maximally effective ways.

A third factor that is likely to be important in disseminating EBPs is ease of access. Currently, less than one-quarter of children and adolescents with behavior problems see a mental health specialist and most interventions are delivered in schools (Burns et al., 1995). In addition, the majority of mental health services are delivered by social workers rather than by psychologists (Weisz, Chu, & Polo, 2004). Thus, it is imperative that delivery of EBPs move beyond the traditional model where treatments are delivered in outpatient settings. Several investigators have done innovative work toward furthering this agenda, including delivering treatment in schools and in school-based mental health clinics (Atkins et al., 1998; Cunningham et al., 1998; Santor, Kusumakar, Poulin, & Leblanc, 2007), community-based group parent education (Cunningham, Davis,

Bremner, Dunn, & Rzasa, 1993), distance treatment delivered by phone and Internet (Lingley-Pottie & McGrath, 2006, 2007; Santor, Poulin, Leblanc, & Kusumakar, 2007), and treatment delivered in recreational settings (Pelham, Fabiano, Gnagy, Greiner, & Hoza, 2005; Reitman, Hupp, O'Callaghan, Gulley, & Northup, 2001; Waschbusch, Pelham, Gnagy, Greiner, & Fabiano, 2008).

Fourth, EBPs would be immediately disseminated if clinicians were ethically, legally, and monetarily required to provide them. In the reviews of EBPs published by the clinical child and adolescent psychology division of APA, it was explicitly stated that the purpose of developing an EBP list was not to prescribe mandated treatments (Chambless et al., 1996; Silverman & Hinshaw, 2008). The state of the science is not sufficient that mandated treatments are a realistic option; however, if sufficient evidence does accumulate to demonstrate beyond a reasonable doubt that a treatment is superior to others, or that a treatment is demonstrably ineffective, then it is not unreasonable to put in place policies that are consistent with this evidence. As one recent author noted,

it is a sorry state of affairs that lawsuits all too often are necessary to get individuals and systems to consider what needs to be done to improve the quality of services in general, and in services to children, adolescents, and families, specifically. (Roberts, 2002, pp. 217–218)

Interestingly, the move toward EBPs has been embraced by leading government officials. In an editorial published in the *New York Times*, Newt Gingrich and John Kerry (along with Billy Beane, a former baseball player and current baseball executive who is renowned for successfully using evidence to make high stakes baseball decisions) wrote:

Studies have shown that most health care is not based on clinical studies of what works best and what does not—be it a test, treatment, drug or technology. Instead, most care is based on informed opinion, personal observation

or tradition . . . a health care system that is driven by robust comparative clinical evidence will save lives and money. . . . To deliver better health care, we should learn from the successful teams that have adopted baseball's new evidence-based methods. The best way to start improving quality and lower costs is to study the stats. (Beane, Gingrich, & Kerry, 2008, p. A31)

This is not to suggest that simply making it public policy that treatments must be empirically based will solve all dissemination problems; there is evidence from education settings that it will not (C. H. Weiss, Murphy-Graham, Petrosino, & Gandhi, 2008). Rather, policies that further the dissemination of EBPs will help doctors make informed decisions based on established research:

Evidence-based health care would not strip doctors of their decision-making authority nor replace their expertise. Instead, data and evidence should complement a lifetime of experience, so that doctors can deliver the best quality care at the lowest possible cost. (Beane et al., 2008, p. A31)

Even so, policies that restrict practitioners from using treatments shown not to work and requiring them to produce rationale if they elect not to use an EBP if one is available seem like common sense regulations. Such policies would likely be accepted and even expected by consumers and practitioners alike when considering treatment for a medical condition; if so, then the same standard should be applied to psychological conditions.

Finally, introducing EBPs into continuing education and graduate education programs may further dissemination efforts (Herschell et al., 2004). One of the barriers to disseminating EBPs is that many clinicians lack the knowledge or training to conduct them. Providing this training during graduate education, internship, or both seems a logical step toward overcoming this barrier. Recommendations for achieving this goal have been provided (Leffingwell & Collins, 2008). In addition,

program directors in graduate training programs should emphasize training in EBP, and practica or internship students should be first vetted for adequate training, experience, and supervision in EBP. Using continuing education to provide training in EBPs presents more difficulties. Many people who deliver mental health services are not licensed and therefore are not required to take continuing education, and staff turnover in practice settings is often high, suggesting that employers who seek to train employees in EBPs would have to do so continually (Higa & Chorpita, 2008). In fact, one could imagine that employers who send their employees to continuing education for EBPs would provide them with new skills that would make them more marketable and thus allow them to find a better job. In addition, continuing education programs are often expensive, suggesting that it would be a considerable cost for either the employer or the employee. Such challenges emphasize the importance of integrating training in EBPs into graduate work and internships.

SUMMARY

The movement toward evidence-based practices for use with children and adolescents with mental health problems presents numerous challenges, many of which seem quite significant. These challenges should not be minimized, but should also not be viewed as insurmountable. Successful development and dissemination of EBPs would likely lead to more effective treatments for more youth at lower cost. Such an outcome is in the best interests of both the children and adolescents who seek treatment and in the society that cares for them.

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44 Overview and Foundational Issues

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46 Overview and Foundational Issues

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