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Community-Clinic-Based Parent Intervention Addressing Noncompliance in Children With Attention-Deficit/Hyperactivity Disorder

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The current study tested whether an abbreviated version of Defiant Children (Barkley, 1987), an efficacious parent training program to address the behavioral noncompliance often associated with disruptive behavior disorders, could be implemented successfully within a community mental health clinic setting by master's-level therapists. Ethnically and socioeconomically diverse parents of 16 children (ages 4 to 12 years old) completed a 6-session active treatment group emphasizing the use of differential attending skills, effective time-out strategies, and a structured reinforcement schedule to increase child compliance. Pre- and posttreatment measures of attention-deficit/hyperactivity disorder (ADHD), oppositional-defiant disorder (ODD), and conduct disorder (CD) symptom level were administered, as well as a measure tapping the contextual breadth (i.e., number of settings) and severity of disruptive behaviors. Parent satisfaction with the treatment was also assessed. Analyses indicated large treatment effects on all measures except CD behavior. Results are discussed in the context of implementing empirically supported therapies in settings where "treatment as usual" is the norm.

Attention-deficit/hyperactivity disorder (ADHD) is a highly prevalent condition in childhood, affecting 3% to 12% of children (Barkley, 2006; Faraone, Sergeant, Gillberg, & Biederman, 2003). The most common psychiatric comorbidity associated with this condition is oppositional-defiant disorder (ODD), which occurs in 45% to 65% of affected children (Angold, Costello, & Erkanli, 1999; Barkley, Edwards, Laneri, Fletcher, & Metevia, 2001; Baumeister et al., 2007). While children with uncomplicated ADHD face heightened risk for problems such as impaired academic and social functioning, family conflict, and psychiatric comorbidity (Hoza et al., 2005; Johnston & Mash, 2001; Spencer et al., 1996), those with comorbid ODD have particularly negative outcomes. Considerable evidence indicates that a pattern of childhood oppositionality and rule-breaking behaviors can presage serious social dysfunction, including antisocial and criminal behavior that often persists into late adolescence and adulthood (Satterfield et al., 2007). Children who exhibit disruptive behavior disorders, such as ODD and conduct disorder (CD), are furthermore at great risk of developing depressed or anxious mood, self-harm, alcohol and substance abuse, school failure and adolescent homelessness (Greene et al., 2002; Scott, Knapp, Henderson, & Maughan, 2001).

Fortunately, treatments for the disruptive behaviors associated with ADHD have been well-researched, and a number of treatments have shown substantial benefits that have been replicated in multiple randomized clinical trials (RCTs; Dretzke et al., 2009; Maughan, Christiansen, Jenson, Olympia, & Clark, 2005; Weisz & Bearman, 2008). Chief among these empirically supported approaches is *behavioral parent training*, a parent-focused intervention that involves teaching parents to create and maintain environments in which desirable child behavior (e.g., obeying adults, independent play) is rewarded and undesirable behavior (e.g., disobedience, impulsive acts) is not. In various forms (e.g., Barkley, 1987; Kazdin, 2003; Patterson, Chamberlain, & Reid, 1982; Webster-Stratton, 1984), this treatment is the most extensively tested and supported form of psychosocial treatment for childhood externalizing behaviors (Pelham & Fabiano, 2008) including "complicated" ADHD (i.e., with oppositional behavior, ineffective parenting, and/or poor social skills; Antshel & Barkley, 2008), showing both initial and long-term effects, and labeled as an empirically validated treatment modality by the American Psychological Association's Division 12 (APA Task Force, 1993). In addition, behavioral parent training has been shown to be rated by mothers of boys with ADHD as more acceptable than psychopharmacological intervention (Johnston,

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Hommersen, & Seipp, 2008), suggesting that initial motivation and eventual adherence to these interventions may be robust.

Despite a wealth of encouraging evidence that behavioral parent training is an efficacious intervention for decreasing the noncompliant and disruptive behaviors associated with ADHD and comorbid ODD, the actual use of these strategies in real-world settings, such as community child-guidance centers, has lagged behind the research (Costin & Chambers, 2007). Some critics of the research-practice gap have noted that treatments which espouse empirical support may remain problematic for implementation in practice settings, for a variety of reasons (Addis & Krasnow, 2000; Westen, Novotny, & Thompson-Brenner, 2004). Notably, the conditions under which most evidence-based treatments (EBTs) have been developed and tested tend to differ markedly from the conditions under which treatments are provided to clinically referred children in everyday mental health care settings (e.g., Southam-Gerow, Weisz, & Kendall, 2003). Specific discrepancies between research trials of treatments and real-world implementation include the psychiatric and social characteristics of the treated individuals, with clinic-referred youths more severely disturbed, more likely to meet criteria for a diagnosis, more likely to have comorbidities, and more likely to drop out of treatment, than youths recruited for RCTs in the research setting. The clients treated in clinics may also differ from participants in RCTs with regard to the reasons for seeking treatment—clinically referred youth treated in practice settings are not recruited from schools or through ads, but rather by caregivers because of impairing problems or family crisis, or even by juvenile courts. Such differences in clientele may suggest that treatments developed in research settings are not "ready for prime time" in terms of their use in the real world.

Other ways in which real-world treatment differs from RCTs include the therapists providing the treatment and the settings in which treatment is delivered. The therapists who provide treatment in clinics may not be as externally motivated as the graduate students or other research associates hired by and loyal to a treatment developer. More specifically, RCT therapists' employment and, in some cases, very professional futures rely on committed and close adherence to the EBT program, which likely maximizes adherence to treatment protocols, as seen in RCTs (Weisz, Jensen-Doss, & Hawley, 2006). A meta-analysis of evidence-based therapists versus usual clinical care showed that therapists delivering manualized treatments in RCTs were significantly more likely to be researchers or graduate student trainees who specialized in the delivery of the EBT being studied, typically for a narrowly defined population of clients (Weisz et al., 2006). Clinic and community-based therapists, on the other hand, tend to be professionals with years of experience and their own treatment preferences, which may match or diverge from the principles of any given EBT. At the least, this engenders greater variability of adherence to EBT procedures. Furthermore, whereas RCT therapists may enjoy more flexible schedules and ample time to prepare for each treatment session, clinicians in typical practice settings face strict productivity requirements or payment per therapy hour, paperwork to complete, and little time to learn a new treatment manual or prepare for each session in advance (Weisz & Bearman, 2008). Community clinics also require the completion of more financial forms, and may entail more bureaucracy than the clinical services provided in academic settings, where participant compliance is of paramount importance to researchers and where the fees are typically waived. Thus, an important step in demonstrating the utility of any psychosocial treatment is to establish its effectiveness in the actual practice settings where treatment is most often sought.

In short, it has been established that behavioral parent-training *can* work for children with ADHD and comorbid ODD; the question remains: *Does* this treatment show the same level of effectiveness in clinical settings? Establishing effectiveness of psychosocial treatments for disruptive behavior disorders is a crucial task, considering that externalizing behaviors and parent-child conflict are the paramount reasons why most children are referred to treatment (Patterson et al., 1982; Renk, 2005; Robin, 1998), and comprise up to 40% of an outpatient clinician's caseload (Kazdin, 1996). Indeed, Chan and colleagues have noted that the overall cost of care for youth with ADHD is significantly greater than for the general pediatric population (Chan, Zhan, & Homer, 2002), and is on the rise (Olfson et al., 2003). These costs are greater still for children with psychiatric comorbidity in addition to ADHD (DeBar, Lynch, & Boles, 2004). Thus, finding brief, cost-effective, and efficacious services to address the impairment caused by comorbid ADHD and ODD would benefit both the individuals who experience the impairment directly as well as the health care system that pays the cost of ineffectual and often lengthy services. However, until there is proof that these interventions are suitable for the clinical setting, clinicians may be skeptical and reluctant to use them.

The Current Study

Given meta-analytic reviews suggesting that the treatment effect sizes for youth psychotherapy offered in clinical settings are typically equal to zero relative to clients who drop out of treatment (Weisz & Weiss, 1989), and evidence that EBTs outperform "usual care" interventions in head-to-head trials—particularly for externalizing disorders (Weisz, Jensen-Doss, et al., 2006)—studies that