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Cognitive-Behavioral Depression Treatment for Mothers of Children With Attention-Deficit/Hyperactivity Disorder

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An adaptation of the Coping With Depression Course (CWDC) was evaluated in mothers of children with attention-deficit/hyperactivity disorder (ADHD), a population at risk for depression. Mothers were randomly assigned to receive the CWDC either immediately following an intensive summer treatment program targeting their child's behavior or after a wait-list period. Measures of maternal functioning, cognitions about child behavior, parent-child and marital relationship quality, child behavior, and ADHD-related family impairment were obtained at pretreatment, posttreatment, and 5-month follow-up. The CWDC resulted in improvements in maternal depressive symptoms, maternal self-esteem, child-related cognitions, and family impairment at posttreatment compared to a wait-list control group that were maintained at follow-up. Findings suggest that the CWDC is a promising intervention for mothers of children with ADHD, particularly those with current depressive symptomatology.

ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IS characterized by developmentally inappropriate levels of inattention, hyperactivity, and impulsivity that are first apparent prior to age 7 and associated with functional impairment in the home, school, and social settings. Given these difficulties, impaired parent-child interactions are a hallmark of the disorder (Johnston & Mash, 2001). Moreover, parents of children with ADHD experience rela-

tively more parenting stress, depression, and marital distress, and lower levels of parenting self-esteem, relative to parents of nonproblem children (for reviews, see Fischer, 1990; Johnston & Mash, 2001). For example, approximately 40% of mothers of children with ADHD have a history of major depressive disorder (MDD; Chronis, Lahey, Pelham, Kipp, Baumann, & Lee, 2003). Furthermore, regardless of depression status, parents of children with ADHD make more negative attributions for their children's misbehavior, particularly their oppositional and aggressive behaviors, than parents of children without behavior problems (Johnston & Freeman, 1997). These negative attributions likely contribute to negative parenting behavior, such as harsh/inconsistent discipline and uninvolvement (Johnston & Patenaude, 1994; Johnston, Patenaude, & Inman, 1992). For example, parents of children with ADHD may fail to focus on positive behaviors that occur in the context of ADHD or oppositional/aggressive behaviors (Freeman, Johnston, & Barth, 1997). They may also withdraw from attempts to manage their children due to beliefs that certain behaviors are beyond their control. Importantly, these parental cognitions may negatively impact parenting, which may then exacerbate child behavior problems, creating a reciprocal pattern of negative interactions in these families (Cummings & Davies, 1999; Lang, Pelham, & Atkeson, 1999; Patterson, 1982; Pelham et al., 1997; see reviews by Beardslee et al., 1983; Cummings & Davies, 1994; Downey & Coyne, 1990).

Three evidence-based treatments for ADHD have been identified: behavior modification (including behavioral parent training and classroom behavioral interventions), stimulant medication, and combined behavioral-pharmacological intervention (Pelham, Wheeler, & Chronis, 1998). While both stimulant medication and behavior therapy rely on

parents to administer the respective treatment consistently, effective ADHD treatments typically do not directly address the psychological well-being of parents (Chronis, Chacko, Fabiano, Wymbs, & Pelham, 2004). Although there is some evidence to suggest that behavioral and pharmacological treatments result in improvements in parent-child interactions and parenting stress/depression (e.g., Anastopolous, Shelton, DuPaul, & Guevermont, 1993), the impact of these interventions on parental well-being is limited (Chronis, Pelham, Gnagy, Roberts, & Aronoff, 2003). Furthermore, maternal depression and parental marital problems are associated with a higher dropout rate from, and poorer outcomes following (Griest & Forehand, 1982; McMahon, Forehand, Griest, & Wells, 1981; Webster-Stratton, 1985, 1992), behavioral parent training programs for noncompliant children and predict response to behavioral, pharmacological, and combined treatments for ADHD (Owens et al., 2003). Parental cognitions about themselves, their ADHD children, and their parenting have also been found to be significant predictors of child ADHD treatment outcomes (Hoza et al., 2000). These findings suggest that parental depression and child-related cognitions may be important targets for intervention in order to maximize treatment response among ADHD children. Indeed, parental adjunctive interventions have been shown to improve maintenance and outcomes following parent training for noncompliant and aggressive children (Griest et al., 1982; Webster-Stratton, 1990). Thus, it is likely that interventions that improve parental well-being, for example by increasing use of coping skills and decreasing depressive symptomatology, may have salutary effects on ADHD treatment outcomes as well.

In addition to predicting poor treatment response, our recent work suggests that maternal depression predicted the future course of conduct problems over 8 years, controlling for demographic variables, early observed parenting, and baseline conduct problems (Chronis et al., in press). These results highlight the importance of treating maternal depression in order to enhance developmental outcomes of children with ADHD.

Given that depression is the most commonly encountered psychological disorder in this population (Chronis, Lahey, et al., 2003), and has been found to predict both poorer treatment outcomes (Owens et al., 2003) and adverse developmental outcomes (Chronis et al., in press) for children with ADHD, it can be argued that it is not only important to treat mothers who are suffering from depression, but also to attempt to *prevent* depression in this at-risk population.

The Coping With Depression Course (CWDC; Lewinsohn, Antonuccio, Steinmetz, & Teri, 1984) is an empirically supported psychoeducational group treatment for depression. This behavioral intervention emphasizes the relationship between thoughts, feelings, and behaviors, and includes four treatment modules (relaxation training, increasing pleasurable activities, cognitive restructuring, and social skills/assertiveness training) that teach participants skills to intervene in each of these areas. Relative to wait-list control groups, the CWDC has been shown to significantly reduce the severity of depressive symptoms and to lead to a greater recovery rate from depressive episodes (Cuijpers, 1998; Lewinsohn, Hoberman, & Clarke, 1989). Furthermore, the CWDC reduces risk for future depressive episodes among recently remitted individuals (e.g., Kühner, Angermeyer, & Veiel, 1996), and has been adapted for use with diverse populations, including adolescents (e.g., Lewinsohn, Rohde, & Seeley, 1998), the elderly (Breckenridge, Zeiss, & Thompson, 1987), minority groups (Organista, Muñoz, & Gonzalez, 1994), and caregivers for the elderly (Lovett & Gallagher, 1988). Based upon the extant research, the CWDC appears to be a nonstigmatizing, cost-effective intervention for both depressed individuals and individuals at risk for depression. It is possible, then, that this intervention would also be helpful for other populations at risk for high levels of stress and distress. Mothers of children with ADHD are one such high-risk group (Fischer, 1990).

The CWDC treatment components appear particularly relevant for mothers of children with ADHD. The relaxation component may help mothers to remain neutral during punishment situations and to ignore mildly inappropriate behaviors. The pleasant activities component is relevant because mothers of children with ADHD often describe spending all of their time fulfilling parenting or work obligations, with little time left to do the things that they enjoy (Johnston & Mash, 2001). The cognitive restructuring module may be helpful in changing negative expectations and attributions related to child behavior that may influence parenting as well as treatment response. Finally, mothers of children with ADHD are required to be assertive in discipline situations with their children, in advocating for their children's educational needs, and in responding to critical family members. As such, they may benefit from assertiveness training, which is included in the CWDC social skills module. Consistent with research findings based on applications of the CWDC to other at-risk populations, it is likely that these cognitive-behavioral skills would have a positive impact on the stress levels and general life

satisfaction of mothers of children with ADHD, regardless of their current levels of depressive symptoms or depression diagnoses.

The current study was designed to test the efficacy of a modified version of the CWDC in mothers of ADHD children who had recently completed an intensive behavioral summer program targeting their child's behavior. We hypothesized that this intervention would improve maternal functioning in terms of depressive symptoms, anxiety, self-esteem, perceived stress, and cognitions about child behavior. We also predicted that the intervention might lead to secondary changes in the parent-child relationship, the marital relationship, child externalizing behavior, and associated family impairment. The potentially moderating effect of maternal history of MDD was explored to determine whether the intervention might be particularly useful for mothers with a history of depression. Finally, satisfaction with this component of treatment was examined.

Method

PARTICIPANTS

Participants were recruited for 3 years (1998–2000) from families who were enrolled in the ADHD Summer Treatment Program (STP) offered by the Center for Children and Families at the University at Buffalo, the State University of New York. During the final week of the STP, mothers were provided the opportunity to participate in a 12-week "Maternal Stress and Coping Group." Sixty-two mothers agreed to participate in the study and signed the study consent form. Twenty-six mothers in Year 1 (15 were randomly assigned to the immediate treatment group, 11 to the wait-list control group), 17 in Year 2 (6 immediate treatment group, 11 wait-list control group), and 19 in Year 3 (12 immediate treatment group, 7 wait-list control group) expressed interest in participating and completed the assessment visit; however, only 60 of these mothers followed through with the assessment procedures. Over the period of 3 years, 60 participants completed the pretreatment self-report measures, 51 completed posttreatment ratings: the remaining 9 either dropped out prior to completion or failed to complete the posttreatment ratings. Twenty-three of the 25 mothers in the immediate treatment group completed follow-up ratings. Thus, analyses of treatment effects were based on 51 participants who completed the protocol; follow-up analyses were based on 23 participants.

Fifty-two percent (n = 12) of mothers in the immediate treatment group and 39% (n = 9) of the wait-list control group had lifetime histories of MDD. None of the mothers in the immediate treatment group and 2 of the mothers in the wait-list group were experiencing a current major depressive episode at the time of intake. Seventeen (34.7%) of the mothers were medicated when the study began, and 13 (26.5%) of these mothers were medicated with antidepressants (8 in the immediate treatment group and 5 in the wait-list control group). Of note, mothers currently taking antidepressant medication had significantly higher pretreatment BDI scores, t(47) = 3.69, p = .001 (M = 14.92 for medicated mothers vs. 8.48 for unmedicated mothers). The remaining medicated mothers were being treated with stimulant, anti-anxiety, and antipsychotic medications. Table 1 summarizes descriptive information for the mothers.

Based on a structured parent interview consisting of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV*) symptoms with situational probes (Pelham, 2003), and on parent and teacher DBD rating scales (Loney & Milich, 1982; Pelham, Evans, Gnagy, & Greenslade, 1992; Pelham, Milich, Murphy, & Murphy, 1989), all of the children were diagnosed with ADHD, according to

Table 1
Maternal characteristics

Maternal characteristic	Immediate treatment group	Wait-list control group
	Mean (*SD*)	Mean (*SD*)
SCID-IV	48% no history of depression 52% history of depression	61.5% no history of depression 38.5% history of depression
HDRS score at intake	5.6 (4.6)	5.2 (4.4)
Mother age	43.2 (5.0) years	40.6 (7.5) years
Marital status	88% married to bio father 8% remarried 0% single parents	65.4% married to bio father 7.7% remarried 19.2% single parent
Mother medication	32% medicated with antidepressants	19.2% medicated with antidepressants
Yearly family income	$65,000–69,999 ($30-35,000)	$70,000–74,999 ($35–39,999)
Education level	0% junior high school 20% high school 4% some college 32% college graduate 44% grad/ professional	3.8% junior high school 3.8% high school 7.7% some college 38.5% college graduate 42.3% grad/ professional
Mother work status	76% employed	88.5% employed

Note. SCID-IV = Structured Clinical Interview for DSM-IV (Mood Disorders Module); HDRS = Hamilton Depression Rating Scale; STP = Summer Treatment Program.

Table 2
Child characteristics

Child characteristic	Immediate treatment group	Wait-list control group
	Mean (SD)	Mean (SD)
Child age	9.6 (2.3) years	9.2 (2.1) years
Child gender	92.0% male	96.2% male
Race	100% caucasian	92.3% caucasian
Child biological/adopted	96% biological	92.3% biological
Intelligence quotient[a]	107.4 (16.07)	99.0 (28.7)
Reading achievement[a]	101.68 (17.47)	91.43 (21.71)
Math achievement[a]	103.95 (11.53)	98.96 (25.62)
ADHD items endorsed in PSI:		
Inattention	7.00 (2.48)	5.04 (4.03)
Hyperactivity/impulsivity	5.36 (2.81)	4.44 (3.80)
Oppositional/defiant items endorsed in PSI:	4.16 (3.14)	3.80 (3.54)
Conduct disorder items endorsed in PSI:	.88 (1.01)	.72 (.97)
IOWA conners parent rating scale		
Inattention-overactivity	10.52 (2.38)	10.8 (2.38)
Oppositional-defiant	8.32 (3.30)	9.56 (3.72)
IOWA conners teacher rating scale		
Inattention-overactivity	10.24 (2.81)	11.12 (2.65)
Oppositional-defiant	4.96 (4.65)	7.45 (4.70)

Note. PSI = Parent Structured Interview.
[a] When children had not received recent IQ or achievement testing at school, the vocabulary and block design subtests of the Wechsler Intelligence Scale for Children-Third Edition (Weschler, 1991) were administered to provide an estimated full-scale IQ, and the Wechsler Individual Achievement Test-Screener (Wechsler, 1992) was administered.

DSM-IV criteria, prior to enrollment in the STP. Of these children, 11.8% met criteria for the Predominantly Inattentive subtype, 3.9% met criteria for the Predominantly Hyperactive/Impulsive subtype, and 82.4% met criteria for the Combined subtype. In addition, 30% of the children met criteria for oppositional defiant disorder (ODD), and 58% met criteria for conduct disorder (CD). Children ranged in age from 5 to 13 (M = 9.48) years at the time of enrollment in the STP. Table 2 summarizes descriptive information for the children.

Measures

MATERNAL FUNCTIONING

The Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), a 21-item self-report instrument that assesses depressive symptomatology, is perhaps the most widely used outcome measure in treatment studies of depression (Dobson, 1989). On the BDI, participants indicate which of four statements most accurately reflects how they felt during the preceding week (e.g., "I do not feel sad" vs. "I feel sad" vs. "I am sad all the time and I can't snap out of it" vs. "I am so sad or unhappy that I can't stand it"). The BDI is highly correlated with clinical ratings of depression (r = .72), and has been shown to have high internal consistency in both clinical and nonclinical samples, with mean coefficient alphas of .86 and .81, respectively (Beck, Steer, & Garbin, 1988). In the current sample, the coefficient alpha was .81.

The Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988) is a 21-item self-report measure of the degree to which an individual has experienced common symptoms of anxiety (e.g., "unable to relax," "nervous," "shaky) over the past week. Responses range from "not at all" (0) to "severely—I could barely stand it" (3). The BAI has been shown to possess high internal consistency in clinical samples (coefficient alpha = .92) and adequate test-retest reliability over a 1-week period, (r = .75). The BAI is widely employed as an outcome measure in treatment studies (Beck et al., 1988). In the current sample, the coefficient alpha was .84.

The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) is a 14-item self-report instrument that measures the degree to which situations in one's life are perceived as stressful. Participants rate how often they have felt or thought a certain way within the past week, ranging from "never" (0) to "very often" (4). For example, one item on the PSS inquires how often in the past week the participant became "upset because of something that happened unexpectedly." The PSS has been shown to measure a different construct than depressive symptom scales and to be sensitive to treatment effects (Cohen et al., 1983). Coefficient alpha reliability estimates for the PSS range from .84 to .86 (Cohen et al.). In the current sample, the coefficient alpha was .86.

The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) is a face-valid 10-item self-report measure of global self-regard. Participants are asked to rate the degree to which they agree with each statement (e.g., "On the whole, I am satisfied with myself"), ranging from "strongly disagree" (1) to "strongly agree" (5), with higher scores indicating more positive self-esteem. The RSE has been shown to be internally reliable by scalogram analyses and to be correlated with theoretically related constructs such as depressed and anxious affect (Rosenberg, 1965). The RSE has been widely used to measure fluctuations in self-esteem over time and as an outcome measure in treatment studies (Graff, Whitehead, & LeCompte, 1986; Johnson, Meyer, Winett, & Small, 2000; Kelley, Coursey, & Selby, 1997). In the current sample, the coefficient alpha was .90.

MATERNAL COGNITIONS ABOUT CHILD BEHAVIOR

The CASQ–Parent Version is a modified version of the Children's Attributional Style Questionnaire (CASQ: Seligman et al., 1984; Kaslow, Rehm, Pollack, & Siegel, 1988). The CASQ–Parent Version is a 24-item forced-choice measure of parents' attributions about positive and negative events related to their children. Participants are presented with a situation (e.g., "Your child gets an 'A' on a test") and two possible causal attributions (e.g., "My child is smart" vs. "My child is good in the subject that the test was in"). For positive and negative child outcomes, three dimensions are assessed: internal/external, global/specific, and stable/unstable. A total score for positive outcomes and a total score for negative outcomes are computed. For the positive event composite, high scores indicate a more adaptive (i.e., more internal, stable, global) attributional style. For the negative event composite, high scores indicate a more depressive (i.e., more internal, stable, global) attributional style. Although no study to date has published the psychometric properties of the Parent Version of the CASQ, extensive research has been conducted with the CASQ. Researchers have reported moderate internal consistency reliabilities (Cronbach's alpha) ranging from .47 to .73 for positive composite scores, and from .42 to .67 for negative composite scores (Gladstone, Kaslow, Seeley, & Lewinsohn, 1997). The coefficient alphas for positive and negative events in this sample were both .40.

The Expected Outcome Questionnaire (EXP; Sobol, Ashbourne, Earn, & Cunningham, 1989) assesses parents' expectations for obtaining compliance from their child (e.g., "Imagine you ask your child to get ready for bed, will your child do it?"). On the EXP, each of the six items is rated on a scale ranging from "almost sure to obey" (0) to "almost sure not to obey" (9). Scores are obtained by computing a mean of the six items. Higher scores indicate a greater tendency to expect noncompliance. In the current sample, the coefficient alpha for EXP items was .86.

RELATIONSHIP QUALITY

The Parent-Child Relationship Questionnaire (PCRQ; Furman & Adler, 1983) is a 40-item measure of several dimensions of the parent-child relationship. Five factors are derived from the PCRQ, including warmth/affection (e.g., "How much do you and this child care about each other?"), personal relationship (e.g., "How much do you and this child go places and do things together?"), disciplinary warmth (e.g., "How much do you give this child reasons for rules you make for him or her to follow?"), power assertion (e.g., "How much do you yell at this child for being bad?"), and possessiveness (e.g., "How much do you want this child to be around you all the time?"). Parents are asked to rate the extent to which each statement characterizes their relationship with their child on a 5-point scale ranging from "hardly at all" (0) to "extremely much" (4). Higher scores indicate a greater degree of each characteristic. A composite of the PCRQ and other measures of parenting was utilized as an outcome measure in the MTA Study, and was sensitive to treatment effects (Wells & MTA Cooperative Group, 2000). In this sample, coefficient alphas for PCRQ subscales ranged from .72 to .88 (warmth = .88; personal relationships = .84; disciplinary warmth = .76; power assertion = .78; possessiveness = .72).

The Dyadic Adjustment Scale (DAS; Spanier, 1976) is a 32-item instrument designed to assess the quality and satisfaction of the marital relationship. For each item (e.g., "Handling family finances"), participants are asked to indicate their degree of agreement or disagreement with their partner, ranging from "always agree" (1) to "always disagree" (6). Total scores can be computed as a general measure of relationship satisfaction, with higher scores reflecting a more positive relationship. The DAS total score has high internal consistency with coefficient alpha = .96 (Spanier, 1976). The DAS is the most widely used measure of marital satisfaction, and has been shown to discriminate distressed from nondistressed couples (Eddy, Heyman, & Weiss, 1991). The DAS is also widely utilized as an outcome measure in marital therapy studies and has been shown to be sensitive to treatment effects (Jacobson, 1984; Jacobson & Follette, 1985; Whisman & Jacobson, 1992). Coefficient alpha in the current sample was .92.

CHILD BEHAVIOR AND ASSOCIATED FAMILY IMPAIRMENT

The IOWA Conners rating scale is a widely used measure that consists of two 5-item subscales reflecting the dimensions of inattention/overactivity (IO) and oppositional/defiant (OD) behavior (Loney & Milich, 1982; Pelham et al., 1989). Parents and teachers rate the degree to which each item (e.g., "fidgeting") describes their child's behavior on a 4-point scale, ranging from 0 (*not at all*) to 3 (*very much*). Pelham et al. (1989) reported adequate internal consistency for each subscale; coefficient alphas were .89 and .92 for the IO and OD subscales, respectively. The correlation between the IO and OD subscales was .62 (Pelham et al., 1989). The IOWA Conners has been shown to be sensitive to treatment effects in many controlled studies of

medication and behavior modification (e.g., Chronis, Fabiano, et al., 2004; Pelham et al., 2001). Given research suggesting that distressed mothers may be biased in their reports of child behavior (e.g., Forehand, Lautenschlager, Faust, & Graziano, 1986), the children's teachers also completed the IOWA Conners Teacher Rating Scale at each time point. In the current sample, the coefficient alphas for Parent IOWA Conners IO and OD were .81 and .90, respectively, and .80 and .93 for the Teacher Conners IO and OD scales, respectively.

The Daily Hassles Questionnaire (DHQ; Crnic & Greenberg, 1990) and Impact on Family Scale (IFS; Sheeber & Johnson, 1992) were included as measures of family impairment resulting from deviant child behavior. The DHQ is a 20-item measure of minor daily irritants associated with parenting (e.g., "Babysitters are hard to find"). On the DHQ, parents are asked to indicate the frequency of each irritant on a 4-point scale ("rarely," "sometimes," "a lot," "constantly") and intensity of each irritant on a 5-point scale ("no hassle" to "big hassle"). Higher scores on each subscale indicate a greater frequency or intensity of hassles. Crnic and Greenberg (1990) report Cronbach's alphas for the frequency and intensity subscales as .81 and .90, respectively. Coefficient alphas for the DHQ frequency and intensity scales were both .85. The IFS assesses family-related changes associated with having a child with behavior problems (e.g., "I have stopped working because of my child's behavior"). It is a 23-item scale that uses a 0-to-4 scale for each item (0 = *strongly disagree*; 4 = *strongly agree*). The IFS used in this study was adapted from the original version designed by Stein and Riessman (1980) for use with the families of children with behavioral difficulties (Sheeber & Johnson, 1992). All item scores are combined to create a total that can range from 0 to 92, with higher scores reflecting a greater impact of child behavior problems on family functioning. The psychometric properties of the IFS are strong. Sheeber and Johnson (1992) report the test-retest reliability coefficient as .96. The internal consistency (Cronbach's) alphas for the total IFS items range from .83 to .89 (Stein & Jessop, 2003). In addition, the IFS has been established as being sensitive to treatment effects (Mott, 1986; Sheeber & Johnson, 1992; Stein & Jessop, 2003). The coefficient alpha for the IFS items in this sample was .89.

TREATMENT SATISFACTION

At the end of treatment, mothers completed a measure of treatment satisfaction designed for this study that asked how helpful they found each of the treatment modules and the degree to which they felt that the topic applied to their needs. They were also asked the degree to which they completed homework exercises, found the leader(s) effective, and would recommend the group to others. Items were rated on a Likert scale, ranging from 0 (*not helpful/ not at all applicable/none/not at all effective/not at all*) to 6 (*extremely helpful/extremely applicable/all of it/extremely effective/definitely*).

PROCEDURE

Immediately prior to being invited to participate in the current study, participants' children completed an intensive, 8-week behavioral summer treatment program for children with ADHD and associated learning and behavior problems, the STP (for detailed descriptions of the program, see Chronis, Fabiano, et al., 2004; Pelham, Fabiano, Gnagy, Greiner, & Hoza, 2004; Pelham & Hoza, 1996). During this program, parents attended weekly group parent training classes utilizing a version of Cunningham's Community Parenting Education program (COPE; Cunningham, Bremner, & Secord-Gilbert, 1994) modified for the STP. Attendance at the STP and at parent training was typically 90% or higher, with few children missing more than 5 of the 40 program days (Pelham & Hoza, 1996; Pelham et al., 2004).

Mothers who participated in the current study attended a 1-hour screening visit, during which time the Mood Disorders and Psychotic Symptoms sections of the SCID for *DSM-IV* and the Modified Hamilton Rating Scale for Depression were administered by advanced doctoral students in clinical psychology. Following this screening assessment, they were randomly assigned to either the immediate treatment or wait-list control group, and given a packet of pretreatment measures to complete (Packet 1). Both groups received a modification of the 12-week CWDC (Brown & Lewinsohn, 1984, Lewinsohn et al., 1984). Treatment groups each included 4 to 9 participants and were conducted by advanced doctoral students in clinical psychology (A.M.C. and S.A.G.). Weekly supervision by a Ph. D.-level clinical psychologist with expertise in the CWDC for depression (J.E.R.) was provided. A textbook, *Control Your Depression* (Lewinsohn, Muñoz, Youngren, & Zeiss, 1978), was used to facilitate skill building. Homework exercises were assigned that involved practicing behavioral skills (e.g., relaxation, increasing pleasant events) and monitoring the impact that each technique had on the participant's mood. As mentioned previously, minor modifications were made to the CWDC manual to increase its relevance for mothers of children with ADHD. Specifically, throughout the modified course, parallels were drawn between
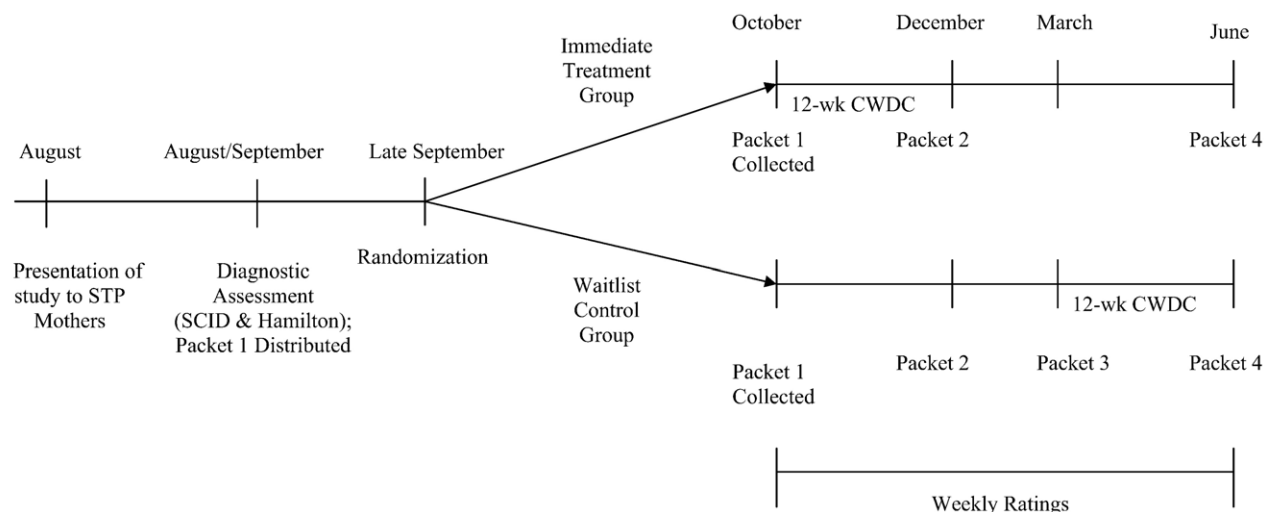
FIGURE 1 Study time line.

behavioral principles taught in this program and those taught in parent training, examples related to their children/parenting were provided, and (because mothers were experiencing varying levels of depression) the term "depression" was replaced with "stress" and "distress." This modification of the CWDC was referred to as the "Maternal Stress and Coping Group." On average, participants attended 9.5 (SD = 2.6) of 12 CWDC sessions.

All self-report instruments were administered at least three times during the study: (1) at the time of the initial assessment, which occurred in the fall immediately following the STP and prior to the CWDC for the immediate treatment group; (2) following treatment for the immediate treatment group; and (3) following treatment for the wait-list control group. Mothers in the wait-list control group also completed measures just prior to beginning treatment. In addition, for the purpose of another study, weekly measures of the BDI, BAI, IOWA Conners, PSS, and RSE were completed. See Figure 1 for a study time line.

Results

ANALYTIC STRATEGY

Consistent with our past practice (Roberts, Shapiro & Gamble, 1999), on each of the weekly measures (BDI, BAI, IOWA Conners, PSS, and RSE), scores from the pre- or posttreatment measures and the weekly rating prior to and following completion of pre- or posttreatment measures (three scores in total) were averaged to provide a more reliable measure of the constructs.

In order to evaluate the effectiveness of the treatment program in the four domains under examination, 2 × 2 (group: immediate treatment,

wait-list control; time: pretreatment, posttreatment) analyses of variance (ANOVA) were performed for each measure (Huberty & Morris, 1989). Effect sizes (d) were calculated by subtracting the posttreatment mean for the treatment group from the posttreatment mean of the control group, and dividing the difference by the pooled standard deviation. Within-subjects ANOVAs were conducted for the treatment group only, comparing scores at posttreatment and follow-up, to examine whether treatment effects were maintained at follow-up.

Data were analyzed in two ways: The first method of data analysis included only the data collected at each time point; the second method followed an intent-to-treat (ITT) approach, in which all of the participants were included in the analyses with their last data point carried forward. In most cases, results of ITT analyses were the same; thus, only findings that differ will be presented in footnotes. For measures that were completed weekly, the final 2 weeks in which the measure was completed were averaged and carried forward.

PRELIMINARY ANALYSES

T tests and chi-square analyses were conducted to compare the immediate treatment and wait-list control groups on demographic variables, including maternal age, child age, family income, severity of child problems, maternal medication status, maternal work status, marital status, and psychological variables. As seen in Table 1, the two groups did not differ on any of these variables. Preliminary analyses examined the extent to which these demographic variables were associated with pretreatment scores on outcome measures. None of the demographic characteristics were consistently associated with dependent measures, with the

Table 3
Self-report measures at pretreatment, posttreatment, and follow-up

Measure	Treatment group (n = 25)			Control group (n = 26)			
	Pre-treatment	Post-treatment	Follow-up	Pre-treatment	Post-treatment	Time × group F	d
Beck depression inventory	11.2 (6.4)	5.0 (4.7)	4.7 (3.5)	9.2 (5.5)	6.7 (6.5)	4.9[*][a]	.30
Beck anxiety inventory	6.9 (6.4)	4.2 (5.4)	3.2 (4.3)	5.7 (3.4)	3.8 (5.7)	.3	.07
Perceived stress scale	28.5 (7.8)	24.0 (5.3)	23.7 (7.2)	26.7 (6.3)	25.7 (6.6)	2.7[+][b]	.29
Rosenberg self esteem	36.8 (6.9)	39.2 (5.7)	38.5 (7.1)	37.9 (7.0)	37.3 (7.6)	7.2*	.29
CASQ-P							
Positive events	6.8 (2.1)	6.9 (2.1)	6.9 (2.2)	7.7 (1.5)	7.2 (1.7)	1.9	.16
Negative events	3.3 (1.8)	3.0 (1.7)	2.8 (1.4)	2.8 (1.3)	3.5 (1.5)	7.2*	.31
Expectations questionnaire	4.0 (1.6)	3.4 (1.6)	3.7 (1.7)	3.5 (1.8)	4.0 (2.0)	6.7*	.33
IOWA conners							
Inattentive/overactive	7.0 (2.6)	6.6 (3.4)	7.2 (3.3)	7.7 (3.0)	6.7 (2.2)	.9	.04
Oppositional/defiant	5.8 (2.9)	5.3 (3.4)	5.6 (4.1)	6.3 (3.3)	6.1 (2.8)	.2	.26
Teacher conners							
Inattentive/overactive	6.2 (3.4)	6.1 (3.8)	6.1 (2.9)	6.9 (3.7)	6.2 (3.0)	.6	.03
Oppositional/defiant	2.8 (3.6)	3.4 (4.6)	3.3 (3.9)	2.3 (2.6)	2.9 (3.7)	.0	.12
Dyadic adjustment scale	119.0 (18.7)	118.7 (20.0)	114.5 (17.5)	115.6 (19.7)	117.5 (18.7)	.7	.06
Daily hassles							
Frequency	25.4 (8.0)	21.7 (6.4)	21.7 (6.5)	24.3 (8.9)	24.1 (9.2)	3.4[+]	.31
Intensity	54.9 (11.7)	51.3 (12.5)	51.2 (2.7)	56.6 (12.8)	55.6 (12.5)		.34
Impact on family scale	46.3 (15.9)	41.7 (15.1)	40.7 (3.4)	44.4 (17.5)	46.9 (16.9)	6.9*	.33
PCRQ							
Possessiveness	5.5 (1.3)	5.2 (1.5)	5.1 (1.5)	5.6 (2.1)	5.4 (2.2)	.3	.11
Warmth	5.9 (1.3)	5.8 (1.2)	6.0 (1.3)	6.0 (1.2)	5.9 (1.3)	.0	.08
Relationship	4.8 (.8)	4.9 (.8)	4.7 (.9)	4.9 (1.1)	4.7 (1.2)	1.2	.20
Disciplinary warmth	5.1 (1.0)	5.0 (1.0)	5.4 (.7)	5.2 (.9)	5.2 (.9)	.1	.21
Power assertion	3.7 (1.0)	3.5 (1.2)	3.4 (.8)	3.9 (.9)	3.9 (.7)	.9	.42

Note. CASQ-P = Children's Attributional Style Questionnaire, Parent Version; PCRQ = Parent-Child Relationship Questionnaire.
[a] Reduced to p < .10 in ITT analyses.
[b] Nonsignificant in ITT analyses.
* p < .05.
+ p < .10.

exception of maternal antidepressant medication. Antidepressant medication was significantly associated with PCRQ Possessiveness ($r = -.28$), BDI ($r = .46$), BAI ($r = .40$), RSE ($r = -.36$), PSS ($r = .33$), and DHQ Intensity ($r = .29$). Thus, all major analyses were rerun with antidepressant medication as a covariate, and we note effects that changed after including this control.

Comparisons were also made between individuals who completed posttreatment measures and those who did not on demographic characteristics and psychological variables. Individuals who dropped out of the study prior to the posttreatment assessment had significantly higher BDI scores at pretreatment, $t(1, 58) = -1.33$, $p < .05$, and higher total family incomes, $t(1, 47) = -2.34$, $p < .05$.

MATERNAL FUNCTIONING

As displayed in Table 3, there were significant Time × Group interactions on the BDI[1,2] and the RSE, and a marginal trend on the PSS. The form of each of these interactions suggested a greater

[1] Results on most measures were identical when antidepressant medication status was controlled, with one exception: the significant Time × Group interaction on the BDI was reduced to a marginal trend ($p = .057$).
[2] Given the large discrepancy between the effect sizes of the CWDC on BDI in the current study and those reported in the literature (Cuijpers, 1998), d was computed separately for individuals who were initially symptomatic (BDI > 9) and those who were not (BDI < 9). An effect size of .63 was found for the symptomatic group, while the effect size for the nonsymptomatic group was only .02.
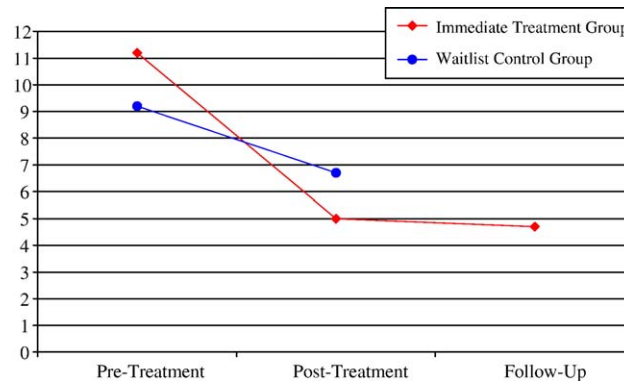
FIGURE 2   Beck Depression Inventory (BDI) scores at pretreatment, posttreatment, and follow-up.

improvement in maternal psychological functioning or less deterioration in functioning from pretreatment to posttreatment for the treatment group relative to the wait-list control group (see Figure 2 as an example).

MATERNAL COGNITIONS ABOUT CHILD BEHAVIOR

Significant Time × Group interactions were found on the EXP and CASQ composite score for negative events, whereby depressive cognitions decreased over time for both groups; however, the slope was steeper for the treatment group relative to the wait-list control group.

RELATIONSHIP QUALITY

No significant Time × Group effects were found on either the DAS or PCRQ (all ps > .10).

CHILD DISRUPTIVE BEHAVIOR AND ASSOCIATED FAMILY IMPAIRMENT

The significant Time × Group interaction on the IFS suggested that mothers in the immediate treatment group reported significantly less impairment as a result of their child's behavior following treatment, while the wait-list control group reported more impairment over time. Likewise, the marginal interaction on the DHQ Frequency scale indicated that mothers receiving treatment reported fewer parenting hassles over time than mothers in the wait-list group. In contrast, there were no significant Time × Group effects on the Parent or Teacher IOWA Conners scales (all ps > .10). Instead, the large, positive, and often normalizing effects of the STP appeared to be maintained over time (Figure 3).

Given that improvement in mothers' perceptions of child behavior might only be expected in cases for which maternal depression improved, we conducted post-hoc regression analyses to examine whether change in mother-rated child behavior from pre- to posttreatment could be predicted from change in maternal depression. Pre- to posttreatment improvement in maternal depression significantly predicted change in parent Conners IO (B = .37, p = .01) and marginally predicted parent Conners OD (B = .35, p = .09) scores, indicating that improvement in maternal depression was indeed associated with improvement in maternal perceptions of child behavior. In order to examine whether this same effect was found for teacher ratings of child behavior, we examined whether change in teacher-rated child behavior from pre- to posttreatment could be predicted from change in maternal depression. Pre- to posttreatment improvement in maternal depression did not significantly predict change in teacher Conners IO (B = .14, p = .44) or OD (B = .10, p = .58) scores, indicating that improvement in maternal depression was associated with improvement in maternal, but not teacher, perceptions of child behavior.

MAINTENANCE OF TREATMENT EFFECTS

Maintenance of treatment effects was examined by conducting within-subjects analyses that compared the immediate treatment group at posttreatment and follow-up on each of the self-report measures. Follow-up data were available for 23 of the 25 participants from the immediate treatment condition. No significant effects of time were found on any of the measures, suggesting that treatment effects were maintained at the follow-up assessment.

DOES MATERNAL DEPRESSION HISTORY MODERATE TREATMENT EFFECTS?

To examine whether maternal history of MDD moderated treatment effects, Time × Group × Depression History analyses were conducted. There was a significant Time × Group × Depression
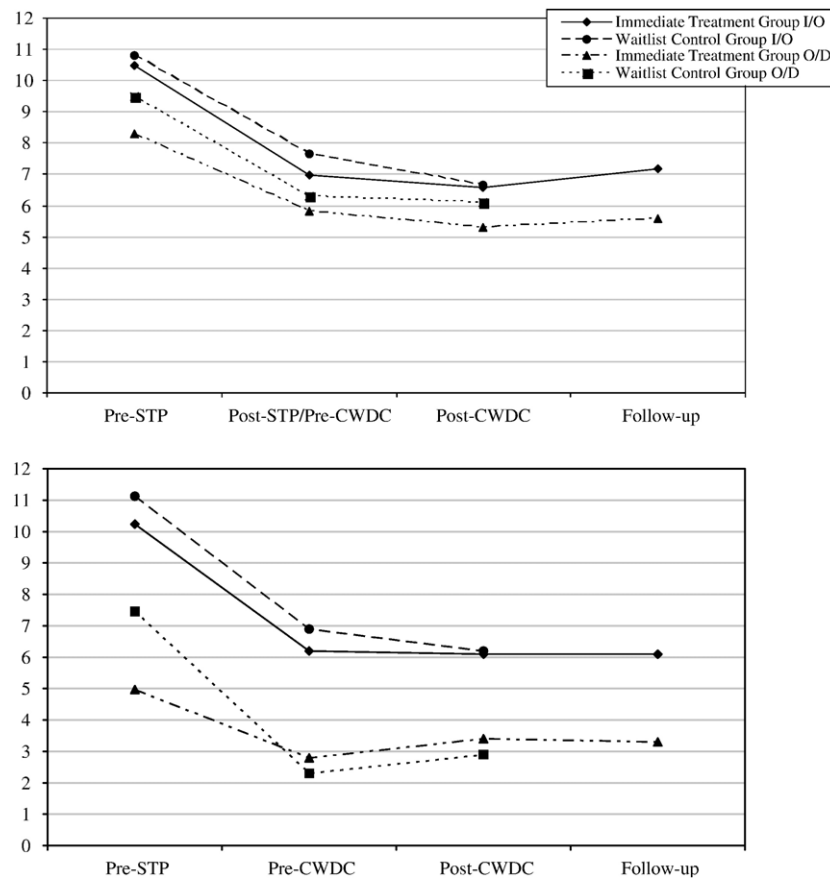
FIGURE 3 Parent IOWA Conners Inattention/Overactivity scores at pre-STP, post-STP/pre-CWDC, post-CWDC, and follow-up (above). Teacher IOWA Conners Inattention/Overactivity scores at pre-STP, post-STP/pre-CWDC, post-CWDC, and follow-up (below).

History interaction on the DAS, $F(1, 34) = 5.74$, $p < .05$. Separate Time × Group analyses conducted for children with previously and never-depressed mothers revealed a significant Time × Group interaction for previously depressed mothers, $F(1, 14) = 6.51$, $p < .05$, $d = .24$, but not never depressed mothers, $F(1, 20) = .65$, $p > .10$, $d = .11$. Following treatment, never-depressed mothers showed a slight but nonsignificant improvement in marital satisfaction, while mothers with depression histories reported a worsening of marital satisfaction.

TREATMENT SATISFACTION

Overall, mothers reported that the course was very helpful ($M = 4.4$, $SD = .90$), found the course very applicable to them ($M = 4.3$, $SD = .92$), and would recommend the course to other mothers of children with ADHD ($M = 5.3$, $SD = .84$). The pleasant activities and constructive thinking modules were uniformly rated as most helpful and applicable; however, all the modules were rated as at least somewhat helpful/applicable.

Discussion

The current study provided a preliminary evaluation of the efficacy of a cognitive-behavioral group depression intervention for mothers of children with ADHD. In this study, mothers were randomly assigned to an immediate treatment group or a wait-list control group following their children's participation in the STP. We hypothesized that participation in the CWDC would result in improvement in four domains: (1) maternal functioning; (2) maternal expectations and attributions for child behavior; (3) parent-child and marital relationships; and (4) parent- and teacher-reported child externalizing behavior problems and parental reports of family impairment resulting from these child behavior problems. Results of this study suggest that the CWDC can be effectively applied to mothers of children with ADHD. Specifically, we found that this intervention led to improvements in mothers' depressive symptomatology, self-esteem, perceived stress (marginally), negative expectations and attributions regarding their children's behavior, and

perceived family impairment resulting from deviant child behavior, relative to a control group. In several instances, the CWDC appeared to ameliorate the deterioration seen in the control group such that the control group got worse after the STP, while the treatment group appeared to maintain or improve following the STP. These findings suggest that the CWDC may have served to maintain the positive effects of the STP for families who received the treatment. These positive effects were maintained 5 months following treatment. Importantly, the results of this study suggest that a cognitive-behavioral depression program for mothers could lead to incremental benefits for families *beyond* that achieved by an intensive, multicomponent intervention for children with ADHD.

The CWDC effectively reduced depressive symptomatology in mothers that received the treatment. However, when all participants were considered, the magnitude of treatment effects found in the current study was very small (Cohen & Cohen, 1983), particularly compared to the average effect size of .65 found in studies evaluating the CWDC (Cuijpers, 1998). This small effect size is most likely due to participants not being selected on the basis of having high levels of depressive symptomatology. Rather, they were selected based on their children's diagnostic status and participation in the STP. That is, only about 50% of the participants entered this study with BDI scores above the minimal cutoff for mild depression (BDI = 10). Indeed, when effect sizes of this intervention were computed separately for initially symptomatic and nonsymptomatic individuals, we found an effect size of .63 for the symptomatic group, which is comparable with the average effect size reported for the CWDC, while the effect size for the nonsymptomatic group was only .02. This suggests that the CWDC may only be necessary and helpful for mothers experiencing current elevations in depressive symptoms. These results are in contrast to our predictions, but are consistent with other studies of adjunctive interventions for parents of noncompliant and aggressive children. Other studies suggest that parents who present with targeted problems experience the greatest incremental benefit of enhanced interventions beyond parent training alone (e.g., Sanders & McFarland, 2000). Future studies of the incremental benefit of adjunctive depression treatment for mothers should specifically target mothers with elevated levels of depressive symptoms.

Despite the overall small effect size found in our sample, we argue that the changes the mothers experienced following treatment were meaningful. In particular, the CWDC intervention brought substantially more participants in the treatment group below the cutoff for mild depression relative to the wait-list control group. Although women in the wait-list control group also experienced reductions in depression over time, three times as many control group mothers remained in at least the mildly depressed range at posttreatment.

In addition to decreasing depressive symptoms, the intervention had a beneficial impact on participants' self-esteem. Low self-esteem in mothers has been theorized to contribute to fewer efforts to obtain compliance from children (Patterson, 1982). Mothers' level of self-esteem has also been shown to predict child treatment response in the MTA study (Hoza et al., 2000). These findings support interventions that target maternal self-esteem as a focus of comprehensive treatment for ADHD and the effectiveness of behavioral interventions in facilitating improvements in this domain.

Mothers in the treatment group also reported fewer depressive attributions and negative expectations regarding child behavior following treatment relative to controls. That is, they were less likely to make internal, global, and stable attributions for their children's misbehavior, and were less likely to expect noncompliance from their children. Importantly, when parents attribute their children's misbehavior to internal and stable causes, they are more likely to respond negatively to such behavior (e.g., Johnston & Patenaude, 1994; Johnston et al., 1992; Slep & O'Leary, 1998). Furthermore, cognitions appear to mediate the relationship between maternal depression and disruptions in parenting behavior in families with noncompliant children (e.g., Forehand et al., 1986). Indeed, Hoza and colleagues (2000) showed that parental attributions for child misbehavior were associated with poorer treatment response in the MTA study. Taken together, these studies suggest that attributions and expectations are important to consider when examining the impact of parenting interventions for ADHD, such as the one evaluated herein.

Surprisingly, our intervention was largely unsuccessful at modifying parent-child relationships. However, the CWDC followed a comprehensive family intervention that intensively targeted the parent-child relationship. While we did not collect pre-STP measures of family functioning (including the parent-child relationship), our prior work suggests that the STP likely resulted in improvements in parent-child relationships, leaving less room for improvement as a function of the subsequent CWDC (e.g., Chronis, Fabiano, et al., 2004). Our intervention was also unsuccessful at improving the marital relationship. The marital relationship was not directly targeted in the CWDC, although a number of mothers discussed

their marriages in the context of the treatment groups and applied the cognitive-behavioral skills to situations with their spouses. It should be noted, however, that only a total of 41 mothers completed the DAS. The remainder of participants were separated, divorced, or not currently in relationships (as would be expected in families of children with ADHD; Befera & Barkley, 1985; Murphy & Barkley, 1996), leaving little power to detect differences as a result of treatment.

Contrary to our hypotheses, no effects of the intervention under investigation were found on parent or teacher reports of child disruptive behavior. First, the more distal effects of this parent intervention on child behavior may be less immediate, and may take time to detect (i.e., sleeper effects). Perhaps even more importantly, this study added maternal depression treatment to a very intensive treatment program for families (i.e., the STP) that has been shown to result in significant improvements in parent-reported child behavior (Pelham & Hoza, 1996; Pelham et al., 2004), and did so in the present sample (see Figure 3). In fact, parent and teacher ratings on the IOWA Conners were at or below the clinical cutoffs following the STP, suggesting that child behavior was essentially normalized. Thus, the STP reduced the variability in child behavior ratings, making it difficult to detect change as a result of the CWDC. Also, limited effects of this intervention on teacher ratings of school behavior would be expected, given that the effects of behaviorally oriented treatments tend to be strongest in the setting directly targeted by the intervention (Pelham et al., 1998). In sum, on measures of child behavior, the large, positive, and often normalizing effects of the STP appeared to be maintained over time, regardless of maternal depression treatment (Figure 3).

However, when we explored whether change in maternal depression contributed to the prediction of change in parent-reported child behavior, we found that this was, in fact, the case. That is, improvements in maternal depression were associated with improvements in child behavior. Of course, this might reflect true improvements in child behavior or improvements in maternal perceptions of child behavior as a function of the alleviation of maternal depression. Not surprisingly, changes in maternal depressive symptoms were not reflected in improvements of school behavior as reported by teachers, suggesting that the indirect effects of the CWDC on child behavior were limited to the home setting. Replication of these findings in a study evaluating the adjunctive intervention following a more widely available, office-based intervention (i.e., parent training) using observa-

tional outcome measures will help to determine whether the CWDC has secondary effects on child behavior.

We were surprised to find that maternal depression did not moderate the effects of treatment on most outcome variables. This, in combination with differences in the magnitude of treatment effects for mothers who were currently experiencing elevations in depressive symptoms versus those who were not, suggests that current depressive symptomatology, rather than a history of MDD, is most useful in determining the extent to which adjunctive depression treatment may be beneficial.

We did find that maternal history of depression moderated the effects of treatment on marital satisfaction. Mothers with depression histories were less likely to experience improvements in marital functioning as a result of the CWDC than were never-depressed mothers. It has been established in at least two seminal studies that behavioral couples therapy is as effective as cognitive therapy in alleviating depression among maritally distressed couples and more effective than cognitive therapy in treating marital distress (Jacobson et al., 1991; O'Leary & Beach, 1990). Thus, for families in which both marital discord and parental depression are present, improvements in marital functioning may be better achieved by using behavioral couples therapy. Evaluating the effectiveness of behavioral marital therapy for maritally distressed parents of children with ADHD remains an important area of future investigation (see Chronis, Chacko, et al., 2004, for a discussion of this point).

Finally, we found that mothers were uniformly satisfied with the intervention. We initially had some concerns about whether mothers of children in the STP would be receptive to an intervention targeting their own functioning. Indeed, the majority of mothers found the CWDC very helpful and applicable, and each reported that they would recommend this program to others. This is an important finding, as satisfaction with treatment likely influences compliance.

Several limitations of this study should be considered when interpreting its results. First, direct measures of parenting behavior, self-report or observational, were not obtained, which would have provided useful and objective information about the effect of this intervention on parenting behavior. Future studies evaluating this intervention should include observational and mother-, father-, and child-reports of parenting behavior. Only then can we address whether effectively treating maternal stress and depression has a beneficial impact on parenting, and ultimately leads to improvements in child behavior.

Second, all outcome measures relied upon maternal self-report, which may have reflected several potential biases. There is substantial, yet somewhat inconsistent, evidence that maternal depression may bias reports of child behavior (for a review, see Richters, 1992). The current design, which relied exclusively on maternal report of child home behavior, did not allow us to examine whether the intervention resulted in improvements in actual child behavior. The use of observational measures of child behavior or reports of child home behavior from another source (e.g., fathers) would provide clearer data on the effects of the intervention on child behavior independent of maternal perceptions. Moreover, participants were not blind to treatment condition; thus, their reports may have been subject to expectancy effects.

Third, the fact that the CWDC was compared to a wait-list control group makes it difficult to discern whether incremental improvements of the CWDC beyond the STP were a function of participants receiving more treatment in general rather than the CWDC specifically. Future studies should include an attention control group that receives the same amount of treatment, but varies the nature of the treatment so that the potentially confounding effects of the amount of treatment will be eliminated.

A fourth limitation is that our sample was limited both culturally and socioeconomically. That is, the sample was drawn from largely Caucasian, middle- to upper-middle-class families that were resourceful enough to enroll their children in an intensive, nationally recognized, university-based clinical research program. Thus, our examination of this adjunctive intervention in a highly selective group of highly motivated, resourceful, and high-functioning families may not generalize to a more representative sample of families of children with ADHD. Future studies evaluating the incremental benefit of treatment components addressing parental problems should clearly be conducted with more culturally and economically diverse populations outside the context of an intensive treatment program.

Some researchers have attempted to study the incremental benefit of adjunctive treatment components that address parental problems by selecting parents with psychopathology based on either *DSM-IV* criteria or elevations on symptom rating scales (Dadds, Schwartz, & Sanders, 1987; Sanders & McFarland, 2000). We, however, chose to include all mothers. This decision was, in part, a result of our clinical experience with many parents who do not possess diagnosable psychopathology, but who nevertheless describe significant personal and interpersonal distress related to parenting a difficult child. Furthermore, our clinical experience

with the CWDC suggested that the skills—engaging in pleasurable activities, relaxation, positive thinking, and social skills—could serve to enhance life satisfaction and effectiveness for all who participated. In fact, the results of this study and other preventive studies using the CWDC support that notion. The CDWC resulted in meaningful improvements in maternal depressive symptomatology, self-esteem, child-related cognitions, and family impairment despite the fact that participants were not selected based on current MDD. Nevertheless, a substantial proportion of mothers of children with ADHD have histories of mood disorders (Chronis et al., 2003). Given that maternal depression has been found to negatively influence response to ADHD treatments, future work should examine the effect of parent-directed treatments on parenting and child behavior in a sample of clinically depressed mothers. Indeed, we are undertaking a larger-scale, NIMH-funded evaluation of an integrated parent training-CWDC intervention that specifically targets mothers of children with ADHD who are currently experiencing elevated depressive symptoms.

This study targeted stress and depression in mothers of children with ADHD. We made this choice based on the fact that mothers are most often the primary caregivers and on the preponderance of evidence suggesting that maternal stress and depression adversely affect parent training outcomes. However, both mothers and fathers of children with ADHD may be suffering from a host of psychological problems, including (but not limited to) ADHD, anxiety disorders, marital distress, anger management problems, and substance abuse (for a discussion, see Chronis et al., Chacko, 2004). While our CBT intervention improved depressive symptomatology, it was less effective in improving marital satisfaction or anxiety. Future studies may address the benefit of matching adjunctive parent treatments to the needs of each individual family, based upon a comprehensive family assessment.

Finally, research suggests that parents of even young children with ADHD and associated behavior problems experience stress and depression related to parenting (Chronis et al., 2003). Given theory and research suggesting that parental stress, parental psychopathology, and child disruptive behavior exert reciprocal influences on one another over time (e.g., Patterson, 1982), efforts should be made to intervene in these domains as early as possible using empirically supported treatment approaches. Parents' role in the attainment, implementation, and continuation of ADHD treatment is essential. Therefore, enhancing parents' ability to function optimally is of utmost clinical importance in providing effective treatments to children with

ADHD, and in helping entire families affected by the sequelae of the disorder.

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