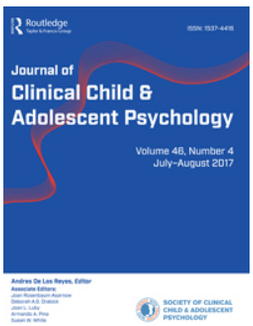
Amelioration of Child Depression Through Behavioral Parent Training: A Preliminary Study



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Amelioration of Child Depression Through Behavioral Parent Training: A Preliminary Study

Dikla Eckshtain
Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School

Sofie Kuppens
KU Leuven, HIVA Research Institute for Work and Society

John R. Weisz
Department of Psychology, Harvard University

Child depression is an impairing condition for which tested treatments have shown relatively modest mean effects. One possible explanation is that the treatments have generally adopted an individual child focus, without addressing the dysfunctional parent–child interactions that often accompany child depression. The present study provides preliminary evidence bearing on this hypothesis, using data from a treatment outcome study in which clinically referred children with a depression diagnosis could receive individual cognitive behavioral therapy (CBT) focusing on the depression or behavioral parent training (BPT) focusing on comorbid conduct problems. Among children in the study who met criteria for *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) depressive disorders, we identified two groups, matched on gender and age: 15 who received only CBT focused on child depression and 15 who received only BPT focused on child conduct problems. Children were 7 to 13, 20 of whom were male, and race included Caucasian (17), Latino (5), African American (2), and multirace (6). Measures assessed depressive diagnoses and symptoms, as well as parenting stress. Analyses focused on whether BPT alone might lead to reduced depression, and if so how that reduction would compare to the depression reduction achieved through CBT that focused on depression. Both groups showed significant reductions from pre- to post-treatment in depressive diagnoses and depression symptoms, and there were no BPT versus CBT group differences at post-treatment. BPT that focuses on child conduct problems, with no emphasis on depression treatment, may produce significant depression reduction in comorbid children who meet criteria for depressive disorders.

Child depression is among the most impairing pediatric conditions (American Academy of Child and Adolescent Psychiatry, 2007). It constitutes a major public health concern, requiring effective interventions. Cognitive behavioral therapy (CBT) is the most thoroughly tested treatment approach; however, a recent meta-analysis of 35 youth depression treatment studies, a majority testing CBT and related cognitive approaches, found only modest treatment benefits for depressed youths, with a mean effect size of 0.34. Closer examination revealed no significant difference between younger and older children with effect size of 0.41 for the seven studies that included children younger than 13 and effect size of 0.33 for the 28 studies that included older children (Weisz, McCarty, & Valeri, 2006).

Recommendations for improving treatment effectiveness have included an expanded focus on parent training

Correspondence should be addressed to Dikla Eckshtain, Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School, 185 Cambridge Street, Boston, MA 02114. E-mail: deckshtain@mgh.harvard.edu

(Weisz et al., 2006), given evidence showing a strong association between child depression, on one hand, and dysfunctional parent–child interactions, on the other (Cicchetti & Toth, 1998; Lovejoy, Graczyk, O'Hare, & Neuman, 2000; Sander & McCarty, 2005). The targets of a parent-oriented treatment could include patterns characterizing families of depressed children. For example, these families tend to show low levels of quality time and enjoyable parent–child activities (Lovejoy et al., 2000); this could be targeted by the traditional behavioral parent training (BPT) "one-on-one time" in which parents devote planned blocks of time to interacting exclusively with their child, showing close attention and interest in the child's activities. Families of depressed children also tend to show low levels of attention to and reinforcement of positive child behavior and positive mood, and inadvertent reinforcement of depressive behavior and negative mood (Messer & Gross, 1995; Sheeber, Hops, & Davis, 2001); this might be addressed through widely used BPT procedures that involve teaching parents to use differential attention, praise, and rewards. Parents of depressed children tend to show negativity (Kim Park, Garber, Ciesla, & Ellis, 2008), criticism (Kazdin & Marciano, 1998), and difficulty expressing emotional support (Stark, Sander, Yancy, Bronik, & Hoke, 2000); these might be targeted through BPT procedures for training parents to avoid "nattering" and to use extensive labeled praise for desirable child behavior. These parenting skills are included in BPT for child conduct problems (Weisz & Kazdin, 2010); therefore, treatment for depressed children might draw from these procedures.

Of the trials for depressed children that were included in the Weisz et al. (2006) meta-analysis, only 32% included parents in the treatment, and in most of these studies parent involvement consisted mainly of psychoeducation. Two research groups have piloted treatment protocols that included BPT components for depressed children, ranging in ages from 8 to 14 (Eckshtain & Gaynor, 2012, 2013; Tompson et al., 2007), and found positive treatment outcomes, but because the studies were open clinical trials, the findings are only suggestive, providing no information on the effectiveness of BPT in comparison with other established treatments. Unlike studies with depressed children, a limited number of trials targeting depression in older adolescents between the ages of 13 to 18 involved parents, for example, family treatment that focused on learning the children's treatment skills and on BPT components like family communication and problem solving (Brent et al., 1997; Clarke, Rohde, Lewinsohn, Hops, & Seeley, 1999; Lewinsohn, Clarke, Hops, & Andrews, 1990). These studies, which did not produce significant effects of parental involvement, did not use BPT procedures as just described, so there has not yet been a test of those procedures, to our knowledge.

Since the specific parenting skills embodied in BPT for child conduct problems may well be relevant to patterns identified in families of depressed children, we sought to learn whether BPT might actually be associated with reduced depression in referred children who met criteria for depressive disorders. We used data from a randomized controlled trial (RCT) that included a subset of children who met criteria for depressive disorders and were treated only with CBT for depression or only with BPT for comorbid conduct problems. We compared these two demographically matched groups at pre- and post-treatment to learn whether BPT for conduct problems alone might actually lead to reduced depression, and if so, how that effect would compare to the depression reduction achieved through CBT which was focused exclusively on depression. We predicted that children in both groups would demonstrate reductions in depressive diagnoses and symptoms and that there would be no group differences at post-treatment.

METHOD

Participants

This study was approved by the Institutional Review Board at Judge Baker Children's Center, Harvard Medical School, and the Institutional Review Board at the University of Hawaii at Manoa. Children and their parents were participants in an RCT investigating the effectiveness of standard evidence-based treatment (Standard Manualized Treatment [SMT]); modular evidence-based treatment (Modular Manualized Treatment [MMT]); and usual care for depression, anxiety, and conduct problems. Inclusion criteria for the parent study were as follows: (a) 7 to 13 years of age, and (b) *Diagnostic and Statistical Manual of Mental Disorders* ([DSM–IV], 4th ed.; American Psychiatric Association, 1994) diagnosis or clinically elevated problem levels in the areas of depression, anxiety, and/or disruptive conduct. The age range reflected, in part, the psychometrics of the study measures (e.g., some of the measures had not been validated for children younger than 7) and, in part, developmental requirements and constraints of the treatment manuals employed, which set the upper limit of the age range at 13. Diagnoses were obtained via the Children's Interview for Psychiatric Syndromes (Weller, Weller, Rooney, & Fristad, 1999a, 1999b) and elevated problem levels (i.e., T scores of $\geq$65) were identified through relevant scales of the Child Behavior Checklist and the Youth Self-Report (Achenbach & Rescorla, 2001). Exclusion criteria included (a) intellectual disability, (b) pervasive developmental disorder, (c) psychotic symptoms, (d) primary bipolar disorder, and (e) primary inattention or hyperactivity. The treatment

focus was determined using information about the diagnosis, symptoms, and the child- and parent-identified top problems (patient priorities). Thus, for a number of children who had depressive disorders, comorbid conduct problems led to a treatment focus on conduct, and thus to the use of BPT. (For further information, see Weisz et al., 2012).

The groups in the current study were formed from participants in the original study. To be included, participants had to have at least one diagnosis of depression, receive evidence-based treatment (SMT or MMT but not usual care) for either conduct problems only or depression only, participate in at least three sessions, and have post-treatment data. Children selected for the BPT group received only BPT for conduct problems. Any child in the original RCT conduct group who received any treatment other than BPT for conduct problems was not included in the current study. Children selected for the CBT group received only CBT for depression. Any child in the original RCT depression group who received any treatment other than CBT for depression was not included in the current study. Figure 1 shows the participant flow from the RCT to the current study. Each group included 15 children, with groups matched on age and gender. All 15 children from each group (100%) matched on gender; age matching was exact for 10 children from each group (67%), within 1 year for two children from each group (13%), within 2 years for two children from each group (13%), and within 3 years for one child from each group (7%). See Table 1 for sample demographics.

Study Conditions

The depression treatment used the Primary and Secondary Control Enhancement Training (Weisz et al., 2005), an individual CBT protocol addressing depression. The conduct treatment used the Defiant Children (Barkley, 1997), a BPT protocol addressing conduct problems. The MMT for depression and the MMT for conduct problems (MATCH; Chorpita & Weisz, 2005) included modules that correspond to the treatment procedures of Primary and Secondary Control Enhancement Training and Defiant Children, respectively. For the purpose of this study children who received SMT and children who received MMT were combined to create one evidence-based treatment group for conduct problems (BPT) and one evidence-based treatment group for depression (CBT). As detailed above, children in the BPT group received only BPT for

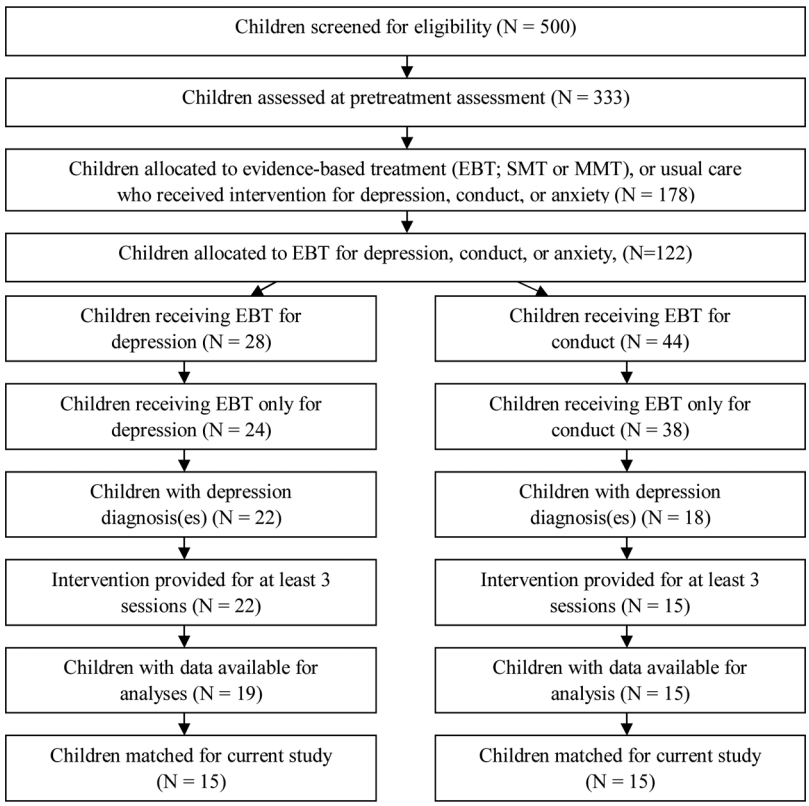

FIGURE 1 Participants flow from recruitment to original study through data used for the current study. *Note:* SMT = Standard Manualized Treatment; MMT = Modular Manualized Treatment.

TABLE 1
Sample Characteristics and Group Differences at Baseline

	Sample Characteristics			*Group Comparison*	
	Composite, N (%)	*BPT, N (%)*	*CBT, N (%)*	*Exact p*	*Hedges's g*
Gender					
Boys	20 (66.7)	10 (66.7)	10 (66.7)	1.00	.00
Girls	10 (33.3)	5 (33.3)	5 (33.6)		
Age					
M	10.37 (1.59)[a]	10.53 (1.69)[a]	10.20 (1.52)[a]	.592	.20
Range	8–13	8–13	8–13		
Grade					
2	3 (10.0)	1 (6.7)	2 (13.3)	.992	.23
3	3 (10.0)	2 (13.3)	1 (6.7)		
4	8 (26.7)	4 (26.7)	4 (26.7)		
5	5 (16.7)	1 (6.7)	4 (26.7)		
6	4 (13.3)	3 (20.0)	1 (6.7)		
7	6 (20.0)	3 (20.0)	3 (20.0)		
8	1 (3.3)	1 (6.7)	0 (0)		
Ethnicity					
Caucasian	17 (56.7)	7 (46.7)	10 (66.7)	.643	.16
Latino/Latina	5 (16.7)	4 (26.7)	1 (6.7)		
African American	2 (6.7)	1 (6.7)	1 (6.7)		
Mixed	6 (20.0)	3 (20.0)	3 (20.0)		
Income					
Less than 40,000	16 (53.3)	8 (53.3)	8 (53.3)	.763	.00
40,000–79,000	9 (30.0)	5 (33.3)	4 (26.7)		
80,000–119,000	4 (13.3)	1 (6.7)	3 (20.0)		
Missing	1 (3.3)	1 (6.7)	0 (0)		
Parents' Marital Status					
Married	11 (37)	5 (33.3)	6 (40.0)	.746	.27
Divorced	8 (26.7)	3 (20.0)	5 (33.3)		
Never Married	4 (13.3)	3 (20.0)	1 (6.7)		
Separated	3 (10.0)	2 (13.3)	1 (6.7)		
Widowed	3 (10.0)	1 (6.7)	2 (13.3)		
Living with a Partner	1 (3.3)	1 (6.7)	0 (0)		

Note: BPT = behavioral parent training; CBT = cognitive behavioral therapy.
[a]Standard deviation.

conduct problems and children in the CBT group received only CBT for depression.

Measures

Depression and conduct-related diagnosis. The Children's Interview for Psychiatric Syndromes – Child (ChIPS) and Parent (P-ChIPS) Form (Fristad et al., 1998; Weller et al., 1999a, 1999b) is a structured diagnostic interview assessing child *DSM–IV* diagnoses. The reliability and validity of this measure are well documented in other studies (Fristad et al., 1998), and five psychometric studies have shown mean sensitivities of 0.66–0.83 and mean specificities of 0.78–0.88 (Weller et al., 1999a, 1999b). The current study used combined ChIPS and P-ChIPS diagnoses that were generated using the Silverman–Nelles (Silverman & Nelles, 1988) procedure for integrating the child and parent reports. Using this procedure, all diagnoses generated by the child's report being accepted if internalizing (e.g., depressive disorders) and all diagnoses generated by the parent's report being accepted if externalizing (e.g., oppositional defiant disorder). The ChIPS and P-ChIPS were administered by masked interviewers.

Depression symptoms. The Youth Self Report (YSR; Achenbach & Rescorla, 2001) and the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) are parallel 118-item self-report and parent-report measures of child behavioral and emotional problems. Children and parents rate each item on a 3-point scale: 0 (*not true*), 1 (*somewhat or sometimes true*), and 2 (*very true or often true*). Both measures generate a total problems scale, broadband Internalizing and Externalizing syndrome scales, and eight narrowband syndrome scales. For the purpose of this study we used the Withdrawn/Depressed and the Anxious/Depressed

scales. The combined score for these scales ranges from 0 to 42, with higher scores indicating higher level of symptoms. The validity and reliability of this instrument have been established in multiple populations (Achenbach & Rescorla, 2001). The Revised Child Anxiety and Depression Scales (RCADS/ RCADS–P; Chorpita, Yim, Moffitt, Umemoto, & Francis, 2000; Ebesutani et al., 2010) are parallel 47-item self-report and parent-report measures of *DSM–IV* depression and anxiety disorders in children. Children and parents rate each item on a 4-point scale: 0 (*never*), 1 (*sometimes*), 2 (*often*), and 3 (*always*). For the purpose of this study we used the Major Depressive Disorder scale. The score for this scale ranges from 0 to 30, with higher scores indicating higher levels of symptoms. The RCADS scores have demonstrated good reliability and high convergent and discriminant validity (Chorpita, Moffitt, & Gray, 2005; Chorpita et al., 2000). The RCADS–P scores demonstrated good internal consistency, test–retest reliability, and convergent and discriminant validity (Ebesutani et al., 2010; Ebesutani et al., 2011). Measures of depressive symptoms reflected a composite score, created separately for child and parent using the child and parent scales from both measures, respectively. Raw scores were first converted to standardized z scores and then averaged to yield the composite scores. A z score equal to 0 represents the mean, a z score greater than 0 represents a score greater than the mean, and a z score less than 0 represents a score lower than the mean.

Conduct symptoms. The broadband Externalizing syndrome scale from the YSR (Achenbach & Rescorla, 2001) and the CBCL (Achenbach & Rescorla, 2001) was used to assess child conduct symptoms reported by the children and the parents, respectively. The combined score on this scale ranges from 0 to 64 on the YSR and from 0 to 70 on the CBCL with higher scores indicating higher level of symptoms. For purpose of consistency with the depressive symptoms, raw scores were converted to standardized z scores.

Parenting stress. The Parenting Stress Index–Short Form (Abidin, 1995) is a 36-item measure assessing the stress a parent experiences as a function of characteristics of the child, the parent, and situations related to the role of being a parent. Parents rate each item on a 5-point scale: 1 (*strongly disagree*), 2 (*disagree*), 3 (*not sure*), 4 (*agree*), and 5 (*strongly agree*). Scores range from 36 to 180, and higher scores indicate higher levels of stress. The Parenting Stress Index demonstrated good test–retest reliability (Abidin, 1995).

Data Analyses

Data from 30 parents and 29 children were available at post-treatment. One parent did not complete the RCADS–P at pre- and post-treatment, so the composite depressive symptoms score was based on the two existing scores. Given the small sample size, nonparametric statistical techniques, which involve rank ordering of data, were used throughout.

Baseline categorical group differences were assessed using Fisher's exact test and Fisher–Freeman–Halton exact test by analyzing 2×2 contingency table and $m \times n$ contingency tables, respectively. Mann–Whitney exact test was used to assess baseline group differences in continuous outcomes. To supplement the identification of statistical significance, raw data were used to compute effect sizes as Cohen d values (Cohen, 1988). The standardized mean difference for independent groups was applied where post-treatment scores for the BPT group were contrasted with the CBT group; the standardized mean difference for dependent groups was applied where pre- and post-treatment scores were compared for a particular group. For frequencies, d values were obtained using Lipsey–Wilson transformation procedures (Lipsey & Wilson, 2001). Because d tends to be biased in small samples, a correction factor was used to obtain an unbiased effect size estimate, often labeled Hedges's g (Hedges, 1985). Interpretation of the effect size followed Cohen's (1988) criteria of .30 = small effect, .50 = medium effect, and .80 = large effect.

McNemar's exact test was used to examine pre–post treatment differences in diagnoses and Wilcoxon-Signed Rank exact test was used to test pre–post treatment differences in depressive symptoms. The pre–post treatment differences were assessed separately for each group. Following treatment completion, Fisher's exact tests were used to examine group differences in diagnoses, whereas Mann–Whitney exact tests were used to test for group differences in depressive symptoms. Calculation and interpretation of effect sizes followed the approach described above. Again, both statistical and practical significance were considered.

RESULTS

Preliminary Analyses

No statistically significant differences between the BPT and CBT groups were obtained for gender, age, family income, grade level, parents' marital status, and ethnicity. All group differences were also negligible in magnitude (see Table 1). As Table 2 shows, the groups did not differ significantly at baseline in level of depressive symptoms, as reported by both the children

TABLE 2
Descriptive Statistics and Groups Differences at Baseline

	BPT				*CBT*				*Group Comparison*	
	N (%)	*M*	*SD*	*Estimate (95% CI)*	*N (%)*	*M*	*SD*	*Estimate (95% CI)*	*Exact p*	*Hedges's g*
Mood Disorder										
Major Depressive Disorder	15 (100.0)				15 (100.0)				–[b]	0.00
Dysthymic Disorder	5 (33.3)				8 (53.3)					
Depressive Disorder	7 (46.7)				2 (13.3)					
NOS	3 (20.0)				5 (33.3)					
Conduct-Related Diagnoses										
Oppositional	15 (100.0)				7 (46.7)				.002	1.90
Defiant Disorder	13 (86.7)				6 (40.0)					
Conduct Disorder	2 (13.3)				1 (6.7)					
Anxiety Disorder[a]	6 (40.0)				11 (73.3)				.139	−0.76
Generalized Anxiety Disorder	3 (20.0)				1 (66.7)					
Separation Anxiety Disorder	3(20.0)				5 (33.3)					
Social Anxiety	0 (0.0)				2 (13.3)					
Specific Phobia	4 (26.7)				4 (26.7)					
Post Traumatic Stress Disorder					1 (6.7)					
Attention Deficit Hyperactivity Disorder	11 (73.3)				9 (60.0)				.700	0.32
Child Depression Symptoms										
Child Report	15 (100.0)	0.23	0.89	−0.26–0.72	15 (100.0)	0.47	0.93	−0.51–0.98	.412	−.25
Parent Report	15 (100.0)	0.50	0.84	0.04–0.97	15 (100.0)	0.49	0.98	−0.06–1.03	.595	.01
Parenting Stress Level	15 (100.0)	106.13	16.53	96.98–115.29	15 (100.0)	81.67	20.70	70.20–93.13	.002	1.27
No. of Sessions	15 (100.0)	8.33	4.03	6.10–10.56	15 (100.0)	18.47	8.34	13.85–23.09	.001	−1.54

Note: BPT = behavioral parent training; CBT = cognitive behavioral therapy; CI = confidence interval; NOS = not otherwise specified.
[a]Several children had more than one diagnosis of anxiety.
[b]For mood disorder no statistic could be computed, because all children had a mood disorder diagnosis.

and parents, and effect sizes were very small in magnitude. The groups significantly differed in the number of children with conduct-related diagnoses; Fisher's Exact $p = .002$, $g = 1.90$. Large group differences did emerge for parenting stress reported by the parents (Mann–Whitney exact $p = .002$; $g = 1.27$), with stress being higher for parents in the BPT group than parents in the CBT group. With regard to treatment characteristics, there was a large statistically significant group difference in the number of sessions attended (Mann–Whitney exact $p = .001$; $g = -1.54$), with more sessions in the CBT group than the BPT group.

Intervention Effects

Both the BPT group (McNemar's exact $p < .001$; $g = 3.04$) and the CBT group (McNemar's exact $p < .001$; $g = 2.73$) demonstrated a statistically significant large reduction in the frequency of depressive diagnoses from pre- to post-treatment. There was a statistically nonsignificant small difference between the frequency of depression diagnoses in the BPT and the CBT groups at post-treatment (no diagnosis = 93% [$n = 14$] vs. 87% [$n = 13$]; respectively); Fisher's Exact $p = 1.00$, $g = .41$).

Within the BPT group there was a statistically significant medium to large reduction in depressive symptoms from pre- to post-treatment based on the children's report, Wilcoxon-Signed Rank exact $p = .023$, $g = -.75$ (pretreatment: $M = 0.23$, $SD = 0.89$; post-treatment: $M = -0.40$, $SD = 0.71$) and the parents' report, Wilcoxon-Signed Rank exact $p = .001$, $g = -1.12$ (pretreatment: $M = 0.50$, $SD = 0.84$; post-treatment: $M = -0.39$, $SD = 0.69$). Within the CBT group, as well, there was a statistically significant large reduction in depressive symptoms from pre- to post-treatment, based on both the children's report, Wilcoxon-Signed Rank exact $p = .004$, $g = -.99$ (pretreatment: $M = 0.47$, $SD = 0.93$; post-treatment: $M = -0.33$, $SD = 0.60$), and the parents' report, Wilcoxon-Signed Rank exact $p = .005$, $g = -1.15$ (pretreatment: $M = 0.49$, $SD = 0.98$; post-treatment: $M = -0.53$, $SD = 0.71$). Comparison between the BPT and the CBT groups at post-treatment revealed nonsignificant negligible between-group differences in depressive symptoms following the completion of treatment as reported by the children (Mann–Whitney exact $p = .511$, $g = .10$) and their parents (Mann–Whitney exact $p = .602$, $g = .19$).

We conducted the same analyses only with the 15 BPT children and seven CBT children who had comorbid depressive disorders and conduct-related disorders and found that there was no substantial difference in findings. One exception is that the children's report of depressive symptoms from pre- to post-treatment only approached statistical significance due to the smaller

sample size. Both the BPT group (McNemar's exact $p < .001$, $g = 3.04$) and the CBT group (McNemar's exact $p = .031$, $g = 2.13$) demonstrated a statistically significant large reduction in the frequency of depressive diagnoses from pre- to post-treatment. There was a nonsignificant small difference between the frequency of depression diagnoses in the BPT and the CBT groups at post-treatment (no diagnosis = 93% [$n = 14$] vs. 86% [$n = 6$], respectively); Fisher's Exact $p = 1.00$, $g = .45$. The results within the BPT group remained the same as just reported because all the children met criteria for conduct-related disorders. Within the CBT group there was a marginally significant large reduction in depressive symptoms from pre- to post-treatment based on the children's report, Wilcoxon-Signed Rank exact $p = .063$, $g = -1.12$ (pretreatment: $M = 0.70$, $SD = 0.95$; post-treatment: $M = -0.31$, $SD = 0.71$), but there was a statistically significant large reduction on the parents' report, Wilcoxon-Signed Rank exact $p = .028$, $g = -1.31$ (pretreatment: $M = 0.88$, $SD = 1.09$; post-treatment: $M = -0.50$, $SD = 0.89$). Comparison between the BPT and the CBT groups at post-treatment revealed nonsignificant negligible between-group differences in depressive symptoms following the completion of treatment as reported by the children (Mann–Whitney exact $p = .757$, $g = .12$) and their parents (Mann–Whitney exact $p = .570$, $g = .14$). Because these analyses are based on a very small number of participants, these results should be considered as preliminary.

We also conducted the same analyses looking at changes in conduct symptoms for the 15 BPT children and seven CBT children who had comorbid depressive disorders and conduct-related disorders. Within the BPT group, there was a marginally significant medium reduction in conduct symptoms from pre- to post-treatment based on the children's report, Wilcoxon-Signed Rank exact $p = .064$, $g = -.51$ (pretreatment: $M = 0.40$, $SD = 1.12$; post-treatment: $M = -0.16$, $SD = 0.97$) and significant large reduction based on parents' report, Wilcoxon-Signed Rank exact $p = .002$, $g = -1.47$ (pretreatment: $M = 0.84$, $SD = 0.83$; post-treatment: $M = -0.31$, $SD = 0.67$). Within the CBT group, there was a nonsignificant negligible reduction in conduct symptoms from pre- to post-treatment based on the children's report, Wilcoxon-Signed Rank exact $p = .799$, $g = -.09$ (pretreatment: $M = -0.22$, $SD = 0.73$; post-treatment: $M = -0.31$, $SD = 0.95$), but a marginally significant large reduction based on the parents' report, Wilcoxon-Signed Rank exact $p = .063$, $g = -1.06$ (pretreatment: $M = -0.12$, $SD = 0.32$; post-treatment: $M = -1.02$, $SD = 1.07$).

DISCUSSION

Childhood-onset depression has multiple negative outcomes and poor prognosis. Existing treatments for child depression demonstrate only moderate outcomes. Despite research demonstrating that child depression is associated with parent–child conflict, no study has, to our knowledge, assessed the impact of BPT on child depression. The present study demonstrated that in a clinically representative sample of referred children, depression diagnoses and symptoms were markedly and significantly reduced from pre- to post-treatment with both individual child-focused CBT and parent-focused BPT, with no differences between the two treatment groups following treatment completion. This suggests that parent-directed treatment focused on improving child conduct and reducing parent–child conflict via behavioral procedures may be a promising strategy for addressing child depression, possibly as the only treatment or perhaps in combination with CBT. The efficiency and brevity of BPT may make it especially attractive where cost-effectiveness is an important consideration.

This conclusion is supported by two other aspects of the findings. First, the BPT used here did not target depression directly, not even partially, yet the improvement in the BPT condition was similar to that achieved by CBT that targeted depression directly. Second, the two groups demonstrated similar improvement despite the fact that children in the BPT group received fewer treatment sessions, and parents in the BPT group had higher levels of parenting stress. These findings notwithstanding, this study is only preliminary, pointing to the potential value of a larger sample RCT.

This study has several limitations. Methodologically, the groups being compared were formed via a matching procedure rather than through randomization, which would have been ideal. An additional limitation is the small sample size, which limited power to detect differences between groups. A third limitation is that the goal of the BPT used here was not to target depressive symptoms but to target conduct problems; therefore, despite the similar improvement of both groups, the results cannot accurately represent outcomes that might be achieved with a form of BPT directed (in whole or in part) at child depression. In the future, large sample research using BPT designed for child depression, and employing randomly assigned treatment groups will add significantly to our understanding of the potential of BPT in the treatment of child depression.

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