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Therapist Focus on Parent Involvement in Community-Based Youth Psychotherapy

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Abstract

Parent involvement in the treatment of childhood disruptive behavior problems is a critical component of effective care. Yet little is known about the amount of time therapists are involving parents in treatment and factors that predict therapists' efforts to involve parents in routine care. The purpose of this study is to examine therapists' within-session involvement of parents in community-based outpatient mental health treatment. The data are from a larger longitudinal observational study of psychotherapy for children ages 4–13 with disruptive behavior problems and include videotaped psychotherapy sessions coded for the therapeutic strategies delivered as well as measures of child, parent/family, and therapist characteristics at baseline. Parent involvement is defined as the proportion of time in the session that therapists direct treatment strategies towards parents. Results indicated that therapists directed treatment strategies towards parents an average of 44% of the time within a session. Multilevel modeling was used to examine client-level (child, parent, and family functioning) and provider-level (therapist experience and background) predictors of parent involvement. Therapists involved parents more when the child had higher levels of behavior problems, when the parent reported higher levels of internalized caregiver strain, and when the therapist was more experienced. The results highlight potential

areas to target in efforts to increase parent involvement, including training less experienced therapists to increase their focus on directing strategies towards parents.

Keywords

Parent involvement; Community-based care; Childhood disruptive behavior problems; Youth psychotherapy; Therapist

Introduction

The most common mental health problems among children in publicly-funded community-based outpatient services are disruptive behavior problems (DBPs; e.g., aggressive, oppositional, argumentative), which are core elements of disruptive behavior disorders (Garland et al. 2001) but can also be present in children who have internalizing disorders (Jackson et al. 2000; Verduin and Kendall 2003). Children with DBPs are at elevated risk for many negative outcomes with significant individual, family, and societal costs (Earls 1994). Fortunately, more evidence-based practice (EBP) treatments are available for DBPs than any other childhood problem area (Eyberg et al. 2008) and there is currently a focus on incorporating evidence-based treatments into community settings (Kazak et al. 2010). Efforts to improve the quality of community-based care are critical as meta-analyses have found that treatment is minimally effective in usual care and the improvement rates are negligible compared to the effects in research trials (Weisz and Jensen 2001).

A common feature of most EBPs for DBPs is parent or caregiver (hereafter referred to as parent) involvement in which parents are taught to change their own parenting behavior and/or to support changes their children are making (Eyberg et al. 2008; Garland et al. 2008). Parent involvement refers to regular attendance in family or parent-focused interventions as well as active participation both in treatment sessions and in implementing treatment strategies between sessions (Nock and Ferriter 2005). Parent involvement has consistently been associated with improved child outcomes (Dowell and Ogles 2010; Karver et al. 2006). Specifically, a large meta-analysis study that compared individual child treatment to treatments that included parents found that youth who received parent-child interventions improved significantly more than those who received individual treatment (Dowell and Ogles 2010). Thus, parent involvement in treatment can be conceptualized as an “evidence-based process” that can improve care and complement efforts to implement many EBPs in community-based care (Huang et al. 2005).

Attention to parent involvement in child treatment is not new to community therapists; two decades ago 78% of surveyed therapists reported involving parents in child treatment (Kazdin et al. 1990). Likewise, our recent observational study of community-based care across treatment up to 16 months found that parents were present in at least part of 70% of sessions (Garland et al. 2010b) The most frequently observed therapeutic strategies targeting parents across treatment included information gathering (observed in 94% of the 851 coded sessions with parents), psychoeducation (81%), establishing and reviewing goals (74%), and addressing the child’s external care (69%). Of those four therapeutic strategies, only one (psychoeducation) was delivered on average at moderate intensity; the other three were delivered at low intensity. Thus, research indicates that parents are often involved to some degree in therapy sessions for their children, and our previous work on the observed frequency of therapeutic strategies across a child’s treatment episode identifies some of the common ways parents are involved (e.g., information gathering, psychoeducation, etc.). However, the *extent* to which therapeutic strategies are being directed to parents within

treatment sessions is not known, and factors associated with parent involvement in treatment sessions in community-based care are also unknown.

Because parent involvement is considered a critical component to EBPs and child mental health treatment more broadly, it can be conceptualized as a focal point within the treatment process. As Southam-Gerow et al. (2006) have described in their ecological framework model of mental health care, treatment processes take place within a multilayered context that includes client-level factors such as symptoms and functioning, provider-level factors such as experience and background, intervention-specific characteristics such as treatment modality, service delivery characteristics such as location of services and timing and number of sessions, organizational factors such as culture and climate, and environmental influences such as funding policies (Southam-Gerow et al. 2006).

We draw from this ecological framework to identify potential factors that may be associated with therapists' involvement of parents in usual care. More specifically, we focus on client-level factors including child, parent, and family functioning at service entry and provider-level factors including experience and background and hypothesize that factors within both levels will contribute to therapists' involvement of parents. The extant research on predictors of treatment processes is extremely limited, but does provide some direction regarding specific hypotheses for predictors within both levels.

In terms of child functioning at entry, research suggests that increased severity and complexity would be associated with more parent involvement from therapists. For example, we found that therapists serving children with higher disruptive behavior problem scores at entry tended to provide more intensive delivery of therapeutic strategies consistent with evidence-based practice elements to parents (Brookman-Frazee et al. 2010). Further, Richards et al. (2008) found that caregivers of children with greater initial impairment attended more meetings and treatment sessions within an integrated school/clinic/home intensive outpatient program. Thus, we hypothesize that severity and complexity of child problems at entry will be positively associated with parent involvement.

Regarding parent functioning at entry, research indicates that addressing parent functioning concomitantly with child treatment can enhance outcomes, suggesting that poor parent functioning can be a hindrance to effective treatment if not adequately addressed (Beauchaine et al. 2005; Reyno and McGrath 2006). Poor parent functioning may prohibit parents' ability to actively participate in treatment and/or therapists may focus more on working with children when parents have mental health problems. Our study of predictors of the intensity of delivery of strategies consistent with evidence-based practices found more intensive delivery of strategies to children when parents reported higher alcohol use (Brookman-Frazee et al. 2010), which supports this notion. Alternatively, parents with mental health problems may elicit more general support and attention from therapists. Thus, we do not have a specific directional hypothesis regarding parent functioning and therapists' involvement of parents in treatment.

When considering family functioning at entry, Richards et al. (2008) found positive associations between impairments in parents' ability to provide for their child and parent involvement in treatment. These results suggest that higher levels of strain and stress in the family may be associated with greater therapist involvement of parents; parents who are experiencing strain related to caring for their child may require more support to enable them to make required changes for the child's benefit. Thus, we hypothesize positive associations between poor family functioning and parent involvement.

In terms of therapist characteristics associated with parent involvement, our study of predictors of the intensity of delivery of strategies consistent with evidence-based practices

found that therapists with less experience tended to provide more intensive delivery of strategies to parents (Brookman-Frazee et al. 2010). These results suggest that therapists with less experience may involve parents more in treatment. Given the focus on family systems within the Marriage and Family Therapy (MFT) discipline, it is also hypothesized that therapists from the MFT discipline and therapists who identify as having a family systems orientation may involve parents more in treatment.

Overall, the extant literature indicates the importance of increasing knowledge about the degree to which parents are involved in community-based treatment for children with DBPs and suggests that a number of child, parent, and family functioning factors as well as therapist characteristics may be associated with parent involvement. We contribute to the knowledge base in two important ways: (1) by examining parent involvement, defined as the proportion of time therapists' spend on parent-directed strategies per session within community-based outpatient child treatment; and (2) by testing for client-level (child, parent, and family functioning) and provider-level (therapist experience and background) factors associated with parent involvement in community-based care, controlling for demographic characteristics at both levels.

Methods

Data from this study were collected as part of a larger observational study comprehensively examining routine community-based care for children with DBPs (Garland et al. 2010b). Refer to Garland et al. (2010b) for details on practice settings and client recruitment.

Participants

Participating Clinics—The six participating clinics represent the largest contractors for publicly-funded, clinic-based outpatient mental health care for children in one of the largest counties in the US. These clinics serve an ethnically and diagnostically diverse population of children and their families. No intervention to influence service delivery took place during the study period.

Therapist Participants—Of the 100 participating therapists in the larger study, 82 were included in the current analyses. Reasons for exclusion included four therapists did not have any clients with videotaped sessions and 14 therapists were not the primary therapist for that child (for children who had taped sessions with two or more therapists, the therapist with the most coded videotapes was determined to be the primary therapist; if multiple therapists had an equal number of coded videotapes, the therapist at baseline was considered the primary therapist). There were no statistically significant differences between primary therapists ($n = 82$) and excluded therapists ($n = 18$) with regard to gender, race, age, experience, discipline, or theoretical orientation. Table 1 lists several characteristics of the 82 therapists (those which are study variables). These therapists were primarily female ($n = 70$, 85%) and Caucasian ($n = 54$, 66%) with an average of 2.8 years of therapy experience; 58% were trainees (versus staff). Therapists came from different mental health disciplines, including marriage and family therapy ($n = 47$, 57%), psychology ($n = 18$, 22%), and social work ($n = 17$, 21%). Consistent with national samples of community-based therapists (e.g., Glisson et al. 2008), therapists were primarily master's level clinicians ($n = 50$, 61%).

Child and Parent Participants—A total of 191 children and their parents who had videotape data were included in the current analyses (out of the 218 in the larger study that included 27 with no videotape data). Inclusion criteria for child participants were: (1) presenting problems included a DBP (aggression, defiance, delinquency, oppositional behavior per parent report); (2) age 4–13 years; (3) primary language for child and parent

was English or Spanish; and (4) the child was entering a new episode of psychotherapy (defined as no therapy for previous 3 months) with a participating therapist.

Several characteristics of the 191 participating children and their parents are provided in Table 1. As indicated, the average child age was 9 years and the majority were male (68%). Although all children had DBPs as a presenting problem, their therapist-assigned primary diagnoses varied, with ADHD being the most common ($n = 74$; 39%). Parent participants were primarily female ($n = 179$, 94%) mothers ($n = 154$, 77%) of the children and nearly half (46%) were racial/ethnic minorities. Average annual household income was \$36,256 ($SD = 30,571$).

Procedures

Data for the current analyses were collected from (1) baseline in-person interviews with parents and therapists to collect demographic, clinical, and family data, and (2) randomly selected videotapes of psychotherapy sessions for up to 16 months of treatment ($n = 1,215$). Refer to Garland et al. (2010b) and Brookman-Frazee et al. (2010) for more details on procedures.

Measures

Outcome of Interest

Parent Involvement: We define parent involvement as the proportion of time in the session that therapists direct treatment strategies towards parents. Parent involvement was measured through the following process. First, each videotaped session was coded for the delivery of 27 different therapeutic strategies (e.g., “psychoeducation” or “exploring client’s past”; see Garland et al. 2010b and Garland et al. 2010c for more detail on the coding system). Codes were assigned to 5 minute segments of each session, resulting in a count of the number of segments per session that included a therapeutic strategy. Coders also indicated whether a therapeutic strategy was delivered to the child and/or a parent. The final parent involvement variable for this study represents the proportion of session segments that included a parent-directed therapeutic strategy (specifically calculated as the number of 5 minute segments with a parent-directed strategy divided by the total number of segments in the session that included any therapeutic strategy). The parent involvement variable ranges from zero to one given that some sessions had no parent-directed strategies whereas other sessions had parent-directed strategies coded in all 5 minute segments. Inter-rater reliability on 30% of coded sessions for the parent involvement variable yielded an intra-class correlation (ICC) of 0.97, demonstrating a high degree of concordance among coders.

Covariates

Child Demographic and Parent Sociodemographic Characteristics: Parent-reported demographic/sociodemographic factors included child age and gender and parent age, race/ethnicity, and education level.

Therapist Demographic Characteristics: Therapist demographics included therapist self-reported gender, age, and race/ethnicity.

Predictors of Interest

Child Functioning at Entry: Child functioning included therapist-reported child primary psychiatric diagnosis and diagnostic comorbidity. Note, given the focus of this study is on disruptive behavior problems, not disruptive behavior diagnoses, all externalizing and internalizing diagnoses were included. In addition, parent-reported severity of child behavior problems was assessed with the Problem Intensity scale of the Eyberg Child Behavior

Inventory (ECBI; Eyberg and Pincus 1999). The ECBI is a well-established 36-item measure that assesses parent-reported behavior problems in children ages 2–16. The measure has excellent psychometric properties that include strong reliability, convergent validity, internal consistency, and discriminative power (Eyberg and Pincus 1999). The Cronbach's alpha for the ECBI was 0.92 in this sample.

Parent Functioning at Entry: Parent depressive symptoms and psychopathology were assessed using the parent-report measures summarized below.

Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff 1977): The CES-D self-report questionnaire asks respondents to rate how often they experienced 20 symptoms of depression in the past week along a 4-point scale. The total score was used in this study to assess parent depressive symptoms. The CES-D has strong reliability and validity for adults in the general population, including diverse racial/ethnic groups, and test-retest reliability for a 6 month time interval was 0.54 (Radloff 1977). Cronbach's alpha for this sample was 0.79.

Brief Symptom Inventory (BSI; Derogatis and Melisaratos 1983): The 53-item BSI was used to measure parent psychological distress. Respondents indicate the degree to which they have been distressed by various psychiatric symptoms on a 5-point scale. The Global Severity Index, a combined index reflecting the number of symptoms and the intensity of perceived distress, was used in the current study as a gross indicator of psychiatric symptomatology. The internal consistency of the BSI ranges from 0.71 to 0.85 across the nine symptom dimensions (Derogatis and Melisaratos 1983). The Cronbach's alpha in this sample was 0.96. High convergence between the BSI and other common measures of psychopathology has been demonstrated (Derogatis and Melisaratos 1983).

Family Functioning at Entry: Family relationship quality, caregiver strain, and negative life events were assessed using the parent-report measures summarized below.

Family Relationship Index (FRI; Holahan and Moos 1983): The FRI consists of 27 true-false items that assess the quality of family relationships. The FRI has demonstrated good internal consistency and construct validity (Hoge et al. 1989; Holahan and Moos 1983). Higher scores indicate better family relationships. The FRI is a single scale comprised of three subscales. The Cronbach's alpha was 0.78 in this sample.

Caregiver Strain Questionnaire (CGSQ; Brannan et al. 1997): The 21-item CGSQ is a self-report measure that assesses three subscales of strain associated with caring for a child with behavior problems: (1) objective strain: observable negative consequences (e.g., financial burden, disruption of family activities), (2) subjective externalized strain: negative feelings directed outward (e.g., anger, frustration) and (3) subjective internalized strain: negative feelings directed inward (e.g., sadness, guilt). CGSQ sub-scales have demonstrated adequate internal consistency and adequate reliability and validity (Brannan et al. 1997; Taylor-Richardson et al. 2006). Cronbach's alpha in this sample was 0.93. Higher scores indicate more strain.

Life Events Questionnaire (LEQ): The LEQ was developed for this study and was informed by existing scales that measure life events that can be stressful for families. The LEQ assesses whether any family members experienced significant changes or stresses related to nine general areas (e.g., employment, family death, finances, legal issues, medical) in the previous 4 months before beginning treatment. The total score reflects the count of the areas in which a stressful event has occurred.

Therapist experience: Therapist experience measures included therapist self-reported length of experience and licensure status.

Therapist Background: Therapist background indicators included therapist self-reported discipline and primary theoretical orientation.

Analysis Plan

SPSS (now called PASW; v. 18; Release April, 2010) was used to calculate sample descriptives and the parent involvement outcome. MPLUS (v. 6, Muthén and Muthén 2010) was used to calculate intraclass correlations (ICC's) to describe the proportion of variance in parent involvement that is attributable to the session, child/parent/family, and therapist levels. Given the nested structure of the data (sessions within children/parents within therapists), HLM 6.06 (Raudenbush et al. 2004), and specifically the HLM3 function, was used to account for all three levels in all regression models. We first examined separate models for child, parent, and therapist demographic characteristics as potential covariates that need to be controlled for when examining the associations between parent involvement and the five sets of predictors of interest: child functioning at entry, parent functioning at entry, family functioning at entry, therapist background, and therapist experience. Separate HLM3 models were run for each group of predictors, controlling for any significant demographic covariates.

Results

As indicated in Table 1, the mean parent involvement score was 0.44 (SD = 0.37; range of 0–1) across all sessions, meaning that therapists delivered parent-directed treatment strategies an average of 44% of the time per treatment session. A total of 30% ($n = 331$) of sessions did not include any parent-directed strategies, thus scoring a 0 on the parent involvement outcome variable.

The intraclass correlation coefficient provides an estimate of the variance for the dependent variable—parent involvement in therapy sessions—accounted for at each level of the data structure. As shown in Table 2, the largest ICC (0.32) was found when therapy sessions (Level 1) were nested within children/families (Level 2), indicating that 32% of the variability in parental involvement at the session level was attributable to child/family characteristics. The ICC for sessions nested within therapists was 0.20, indicating that 20% of the variability in parental involvement at the session level was attributable to therapist characteristics. Similarly, the ICC for children/parents/families nested within therapists was 0.20, indicating that 20% of the variability in parental involvement at the child/parent/family level was attributable to therapist characteristics. All ICCs were above the conventional significance level of 0.05, indicating that a statistically significant proportion of the variability observed in parental involvement at each level was accounted for by child/parent/family and therapist characteristics.

Preliminary analyses examining child, parent, and therapist demographic characteristics as potential covariates to include in the primary analyses indicated that child gender was significant, such that therapists involved parents more when the client was a boy versus a girl ($B = 0.089$, $SE = 0.043$, $p < 0.05$). Thus, child gender was included as a covariate in all primary analyses.

Results of the hierarchical linear models designed to identify significant predictors of parent involvement in sessions (specifically the proportion of the treatment session within which a therapeutic strategy was directed toward the parent) are presented in Table 3. Significant effects were found in the child functioning, family functioning, and therapist experience

models, and additional marginal results were identified for family functioning (caregiver externalized strain). No significant effects were found in the therapist background model.

For child functioning, higher child symptom severity was significantly associated with an increased proportion of parent-directed therapeutic strategies. While neither parent functioning predictor was significantly associated with proportion of parent involvement, within family functioning caregiver strain was revealed to be important. Subjective internalized caregiver strain was a significant predictor of the proportion of parent involvement while subjective externalized caregiver strain was a marginal predictor, though in opposite directions. Higher parent involvement was seen for cases where parents who reported higher levels of internalized strain at baseline, while marginally lower parent involvement was seen for cases where parents reported higher levels of externalized strain.

The remaining two multivariate models analyzed therapist experience and background as predictors of parent involvement. Here, only therapist experience was associated with parent involvement, with therapists who have been practicing longer spending more time within the session directing strategies toward parents.

Discussion

This study used multi-level modeling to identify whether child, parent, and family functioning at entry and therapist experience and background were associated with observed therapist use of parent-directed strategies, described as parent involvement, in community-based psychotherapy for children with DBPs. Results suggest that therapists spend a moderate amount of time in sessions involving parents by directing therapeutic strategies to parents. Specifically, therapists direct strategies towards parents, on average, 44% of the time during the session. This finding extends our earlier work, which found that parents were present in at least part of over 70% of sessions over the course of child treatment and indicated the use of several types of parent-directed strategies, including psychoeducation, establishing and reviewing goals, gathering information, and addressing the child's external care (Garland et al. 2010b). The current study's results provide much greater detail indicating that therapists are directing therapeutic interventions to parents almost half of the time within sessions. The results also indicate that a significant proportion of the variance in parent involvement within sessions is accounted for by child/parent/family and therapist characteristics. Specific predictors of the variability in parent involvement included child symptom severity, caregiver strain, and therapist experience. Therapists involved parents more when the child had a higher level of reported behavior problems at baseline, when the parent reported high levels of internalized caregiver strain and lower levels of externalized strain (marginal) at baseline, and when the therapist had more years of experience. Overall, the results indicate support for the ecological framework (Southam-Gerow et al. 2006) in that both child-level and provider-level factors were associated with therapists' involvement of parents within sessions.

Child symptom severity was the only child functioning variable significantly associated with parent involvement. As hypothesized, children with more behavior problems had higher parent involvement. Therapists and/or parents may—implicitly or explicitly—perceive a need for greater parent involvement in care for children with more behavior problems. In addition, children with greater symptom severity may be more difficult to engage directly in treatment; consequently, therapists may spend more time working with the parent as opposed to the child. The lack of significant association with primary diagnosis is consistent with our other results indicating that diagnosis is not strongly associated with variability in treatment processes or outcomes (Brookman-Frazee et al. 2010; Brookman-Frazee et al. 2008; Garland et al. 2010a). Although not a predictor variable of interest, it is notable that

parents of boys were more involved within sessions. This finding is consistent with previous research that revealed parents of boys attended more therapy sessions than parents of girls (Israel et al. 2007).

There were no significant parent functioning factors associated with parent involvement. The lack of a significant association is interesting given the EBP literature suggests that addressing parent mental health problems either before or during child treatment can improve outcomes for children (Cunningham and Henggeler 1999; Ireland et al. 2003; Schoenwald et al. 2000). However, family functioning characteristics were associated with parent involvement in both directions. As hypothesized, therapists involved parents more when the parent reported higher internalized subjective caregiver strain. However, higher externalized subjective caregiver strain was marginally associated with less involvement. It may be that therapists are focusing therapeutic strategies towards parents when they perceive the parent to be experiencing significant emotional (internalized) stress. Likewise, parents who feel worried, sad, or guilty about their child's mental health problem may be discussing these feelings, to which therapists are responding with strategies directed towards the parents. However, parents who are angry and/or resentful about their children's mental health problems (i.e., higher on externalized strain) may be less likely to engage in treatment and less likely to engender therapists' attention. These findings complement previous literature indicating the types of caregiver strain differ in their impact on outcomes (e.g., Brannan et al. 2003). Taken together, the lack of a significant association with parent functioning and significant association with family functioning suggest that therapists involve parents more in usual care treatment when poor functioning is related to the child.

Therapist background was not associated with parent involvement. Although we hypothesized that a more family-focused therapist background would be associated with greater involvement, the lack of significant associations is consistent with our study examining predictors the intensity of delivery of strategies consistent with evidence-based practices to parents (Brookman-Frazee et al. 2010). Contrary to our hypothesis based on previous research, therapists with more experience involved parents more in sessions. We speculate that this finding may indicate greater comfort or more experience working with parents. It is interesting that the age of the therapist was not a significant covariate; thus, the significant effect of level of experience seems to represent more than just greater life experience. While, on average, the therapists in this study were relatively inexperienced (average of 2.8 years), the distribution of trainee participants is consistent with other publicly-funded clinics (Hawley and Weisz 2005).

Of course, examining the amount of care that is directed towards parents does not capture the whole story. Qualitative data from a study of parents of children served in the public mental health sector revealed that a number of parents feel unsupported and even blamed during child treatment (Baker-Ericzén et al. under review). In fact, parents reported that their therapists did not offer directive strategies or provide support for their own needs enough within treatment sessions, which they desired (Baker-Ericzén et al. under review). The current study suggests that therapists are delivering therapeutic intervention strategies to parents almost half of the time in sessions, but related research indicates that psychoeducation and attention to a child's external care are the predominant types of parent-directed strategies delivered (Garland et al. 2010b). The more active problem-solving and behavioral-based parent training common elements of evidence-based practices are not the most frequently observed therapeutic strategies; thus, therapists may require encouragement to target parent involvement toward more active parent participation and include strategies that are evidence-based (Brookman-Frazee et al. 2010; Garland et al. 2008).

This study has several methodological strengths including observational coding (as opposed to self-report) to assess within-session practice, as well as established self-report measures to assess many key child clinical and parent/family characteristics. The analytic approach of random effects multi-level modeling accounts for the clustered nature of the data and provides a conservative test of the associations between the predictor variables and the parent involvement outcome. The sample includes a relatively large and diverse group of patients and therapists who are generally representative of other samples from community-based clinical settings. However, the extent to which the findings generalize to other service system populations in other geographic areas, and/or with other clinical problems (e.g., children with different presenting problems or in privately funded service systems), is unknown. In addition, given that families participating in the study had progressed to scheduling an appointment in a clinic and participated in an initial intake interview for the research project, the sample does not represent all children/families seeking care. Research has indicated that only about 50% of families who contact a clinic for services actually begin treatment (Pellerin et al. 2010). Our sample is biased in favor of families who demonstrated an initial commitment to attend treatment and consented to participate in a baseline research interview.

Although a rich set of predictors were tested across the child and provider levels of the ecological framework, there are likely important predictors that were not tested in this study. For example, we did not have an adequate measure of parents' motivation or expectations to participate in treatment, which is a critical component for parent involvement (Staudt 2007). In addition, our assessment of parent involvement was restricted to observable therapist-directed intervention within treatment sessions and thus did not capture parents' involvement outside of sessions through phone or other contact. Finally, we did not examine parents' responses to the strategies delivered towards them, and more specifically their quality of participation (e.g., listening attentively, being receptive to new ideas, asking questions when appropriate, actively contributing to discussions and activities, trying new strategies at home) was not examined. Recent studies of manualized treatment and preventive interventions have examined links between quality of participation and outcome, as well as predictors of quality of participation (e.g., DeGarmo et al. 2009; Nix et al. 2009) indicating its importance. Research on the nature and quality of parents' participation in community-based care is needed. In addition, this study did not address predictors within the other levels of the ecological framework, namely intervention-specific characteristics, service delivery characteristics, organizational factors, and environmental influences.

To our knowledge, this is the first study to examine therapist involvement of parents in community-based treatment sessions for children with DBPs. The study results have important policy and clinical applications. From a policy perspective, it is encouraging that parents are being involved to a moderate degree in community-based care for children with DBPs, but there is clearly room for improvement, and certainly, efforts need to be made to not only increase the amount parents are involved but how they are involved. The promotion of increased parent involvement in community-based care complements current efforts to implement EBP models for DBPs (Kazak et al. 2010). From a clinical perspective, the results suggest a dynamic process to parent involvement; therapists may need to tailor the amount of parent involvement to fit the degree of child and parent functioning while parents may be approaching therapy differentially and spontaneously involving themselves based on their own perspectives and resources. These results support the need for parent engagement strategies such as providing education on the therapy process to parents prior to the start of treatment. Last, the results suggest a need for therapist training regarding parent involvement. Training efforts should target increasing newly practicing community therapists' skills in involving parents more in treatment and encouraging all therapists to

consider child and family functioning in making decisions regarding tailoring their parent involvement efforts.

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Table 1

Descriptives on all study variables

Measure	Mean (SD) or %	Range
<i>Child demographics</i>		
Male gender	67.5%	
Age	9.0 (2.7)	4–14
<i>Caregiver/family demographics</i>		
Age	40.1 (10.2)	22–69
Race		
White	55.5%	
Hispanic	28.8%	
African American	9.4%	
Multiple/other race	6.3%	
Education level		
Some high school	16.8%	
High school degree/some college	64.9%	
College/grad school	15.7%	
<i>Therapist demographics</i>		
Female gender	85.4%	
Age	32.0 (8.7)	23–56
Race		
White	65.9%	
Hispanic	8.5%	
African American	3.7%	
Multiple/other race	22.0%	
<i>Child functioning at entry</i>		
Eyberg child behavior inventory problem intensity	146.7 (36.4)	59–237
Primary diagnosis		
ADHD	38.7%	
Mood	23.6%	
DBD	20.4%	
Anxiety	8.9%	
Other	8.4%	
Comorbid diagnoses	48%	
<i>Parent functioning at entry</i>		
Center for epidemiological studies-depression	15.4 (10.6)	0–45
Brief symptom inventory (global severity index)	0.7 (0.6)	0–2.5
<i>Family functioning at entry</i>		
Family relationship inventory	9.2 (4.5)	–5–17
Caregiver strain questionnaire		
Objective	2.4 (1.0)	1–5
Internalizing	3.6 (1.0)	1–5

Measure	Mean (SD) or %	Range
Externalizing	2.3 (0.8)	1–5
Negative life events	3.0 (1.7)	0–9
<i>Therapist experience</i>		
Months in practice	33.3 (42.7)	0–300
Licensed	13.4%	
<i>Therapist background</i>		
Discipline		
Marriage & family therapy	57.3%	
Psychology	22.0%	
Social work	20.7%	
Orientation		
Family systems	36.6%	
Cognitive/behavioral	28.0%	
Eclectic/other	26.8%	
Psychodynamic/humanistic	8.5%	
<i>Outcome variable</i>		
Parent involvement ^a	0.44 (0.37)	0–1

^aParent involvement is the proportion of the session in which the therapist directed strategies towards the parent. All coded sessions were included; thus, the range of 0–1 represents those sessions in which the parent was not in the session at all (value = 0) as well as those sessions in which strategies were directed to parents throughout the entire session (value = 1)

Table 2

Intraclass correlations for parent involvement at session, child/parent/family, and therapist levels

Level 1	Level 2	Parent involvement
Session	Child/parent/family	0.317
Session	Therapist	0.204
Child/family	Therapist	0.201

Table 3

Hierarchical linear models predicting parent involvement (i.e., the proportion of the session with parent-directed strategies)

Predictor variable	Regression coefficient (standard error)	p value
<i>Child functioning at entry model (n = 1,098 for level 1; n = 191 for level 2; n = 82 for level 3)</i>		
Female child	-0.093 (0.045)	0.041
Eyberg child behavior inventory	0.009 (0.004)	0.031
Primary diagnosis (reference group = DBD)		
ADHD	-0.025 (0.046)	0.579
Mood	-0.034 (0.062)	0.578
Anxiety	-0.070 (0.055)	0.206
Other	0.045 (0.069)	0.521
Comorbid diagnoses	-0.040 (0.038)	0.296
<i>Parent Functioning at entry model (n = 858 for level 1; n = 164 for level 2; n = 61 for level 3)</i>		
Female child	-0.122 (0.052)	0.020
Center for epidemiological studies-depression	0.005 (0.003)	0.109
Brief symptom inventory	-0.078 (0.048)	0.106
<i>Family functioning at entry model (n = 1,098 for level 1; n = 191 for level 2; n = 82 for level 3)</i>		
Female child	-0.095 (0.044)	0.034
Family relationship inventory	-0.002 (0.004)	0.732
Caregiver strain questionnaire		
Objective	0.010 (0.023)	0.683
Internalizing	0.051 (0.024)	0.031
Externalizing	-0.047 (0.026)	0.070
Life Events questionnaire	0.013 (0.009)	0.172
<i>Therapist experience model (n = 1,098 for level 1; n = 191 for level 2; n = 82 for level 3)</i>		
Female child	-0.096 (0.042)	0.023
Months in practice	0.014 (0.007)	0.043
Licensure ^a	0.031 (0.051)	0.542
<i>Therapist background model (n = 1,098 for level 1; n = 191 for level 2; n = 82 for level 3)</i>		
Female child	-0.089 (0.044)	0.042
Discipline (reference group = MFT)		
Psychology	0.085 (0.062)	0.173
Social work	0.030 (0.040)	0.464
Orientation (reference group = CBT)		
Family systems	0.024 (0.053)	0.648
Psychodynamic/humanistic	-0.075 (0.068)	0.277
Eclectic/other	0.060 (.049)	0.227

Robust standard error solution is reported, which controls for non-normality in the variables. Session is level one, child/caregiver is level two, and therapist is level three. Regression coefficients reported are unstandardized. *HS* High School, *DBD* Disruptive Behavior Disorders (Oppositional Defiant Disorder/Conduct Disorder), *ADHD* Attention Deficit/Hyperactivity Disorder, *MFT* Marriage and Family Therapy, *CBT* Cognitive/Behavioral or Behavioral. Sample sizes differ based on missing data due to participants not completing all measures or some measures being added after the start of the study.

^a0 = Unlicensed; 1 = Licensed