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Evaluation of the sustainability and clinical outcome of alternatives for families: A cognitive-behavioral therapy (AF-CBT) in a child protection center

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Abstract

This paper examines the sustainability and outcome of Alternatives for Families: A Cognitive-Behavioral Therapy (AF-CBT) as delivered by practitioners in a community-based child protection program who had received training in the model several years earlier. Formerly described as Abuse-Focused CBT, AF-CBT is an evidence-based treatment (EBT) for child physical abuse and family aggression/conflict that was included in the National Child Traumatic Stress Network's initial EBT dissemination efforts in 2002. Seven practitioners participated in a year-long Learning Collaborative in AF-CBT and in similar training programs for 4 other EBTs. The agency's routine data collection system was used to document the clinical and adjustment outcomes of 52 families presenting with a physically abused child who received their services between 2 and 5 years after the AF-CBT training had ended. Measures of the use of all 5 EBTs documented their frequency, internal consistency, and intercorrelations. Controlling for the unique content of the other four EBTs, the amount of AF-CBT Abuse-specific content delivered was related to improvements on standardized parent rating scales (i.e., child externalizing behavior, anger, anxiety, social competence) and both parent and clinician ratings of the child's adjustment at discharge (i.e., child more safe, less scared/sad, more appropriate with peers). The amount of AF-CBT General content was related to a few discharge ratings (better child prognosis, helpfulness to parents). These novel data provide suggestive evidence for the sustainability and clinical benefits of AF-CBT in an existing community clinic serving physically abused children and their families, and are discussed in the context of key developments in the treatment model and dissemination literature.

Introduction

Several evidence-based treatments (EBT) consisting of behavioral or cognitive-behavioral procedures directed to both children and parents have been developed for application to families involved in child physical abuse or exposed to physical force (Kolko & Kolko, in press; Silverman et al., 2008). These approaches include Multisystemic therapy (MST; Brunk, Henggeler, & Whelan, 1987), Abuse-Focused Cognitive-Behavioral Therapy (AF-

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CBT; Kolko, 1996b; Kolko & Swenson, 2002), Parent-Child Interaction Therapy adapted for use with physical abuse (PCIT; Chaffin et al., 2003) and Combined Parent-Child CBT (Runyon, Deblinger, & Schroeder, 2009). Other related interventions for trauma exposure include Child Parent Psychotherapy (CPP) for young children (Lieberman, Ippen, & Van Horn, 2006), Trauma-Focused Cognitive Behavioral Treatment (TF-CBT; Cohen, Deblinger, Mannarino, & Steer, 2004), and Cognitive Behavioral Intervention for Trauma in Schools (CBITS; Stein et al., 2003). Common targets of these interventions include changes in parenting practices, child behavioral and emotional problems, and/or recidivism, though the level of scientific rigor and clinical impact varies across studies (Silverman et al., 2008).

Since the initiation in 2002 of the National Child Traumatic Stress Network (NCTSN; www.nctsn.org) with its mission to improve services for traumatized children and their families, several EBTs have been disseminated to facilitate their application to child abuse and neglect cases in community settings. TF-CBT has been trained in several state-wide initiatives and structured learning collaboratives to large numbers of practitioners which have yielded suggestive evidence regarding treatment fidelity and clinical benefits (Cohen & Mannarino, 2008), and developments in the use of family engagement and focused assessment methods (Hoagwood, Vogel et al., 2007). A novel field trial of TF-CBT and CBITS following the trauma of Hurricane Katrina has provided helpful case examples and findings regarding clinical benefits among treated children, but also documented limited uptake and a need to enhance overall level of treatment response among traumatized children (Cohen et al., 2009; Jaycox et al., 2010). Other EBTs are likewise being applied in diverse community settings, including PCIT (Franco, Soler, & McBride, 2005; Herschell et al., 2009), MST (Brunk et al., 1987; Swenson & Chaffin, 2006), and Multidimensional Treatment Foster Care (Chamberlain et al., 2008; Price et al., 2008).

With the extensive dissemination of numerous EBTs targeting abused and neglected children, it is important to document empirical evidence describing the application and clinical effects of these EBTs in real-world, community settings (Dean et al., 2008; McHugh & Barlow, 2010). For example, there is limited information regarding the treatment repertoires of practitioners who have been trained in several EBTs and the extent to which they actually use their procedures (Kolko, Hoagwood, & Springgate, in press). Clearly, it would be important to determine the extent to which practitioners maintain their use of these methods well after outside training, consultation, and fidelity feedback have ended. This information would provide some understanding of the potential sustainability of an EBT. In addition, there are only a few anecdotal or empirical reports on the benefits of EBTs in community settings (Cohen et al., 2009; Cohen & Mannarino, 2008; Jaycox et al., 2010), which highlight the need to expand the availability of empirical data on client outcome based on a typical caseload. This information would help to support the clinical utility of an EBT.

The collection of sustainability and clinical utility data would enhance our understanding of the generalizability of EBT dissemination efforts (Kolko et al., in press). Initial surveys have identified some of the treatment practices and training/supervisory experiences of community practitioners associated with good perceived client outcomes (Kolko, Cohen, Mannarino, Baumann, & Knudsen, 2009), but such information provides only indirect support for the potential benefits of CBT when applied in community settings. Empirical data on the use and outcome of EBTs must be reported if providers, policy makers, and researchers are to better understand (1) the level of overlap among and benefits associated with the use of EBTs, (2) factors that may influence the achievement of positive client outcomes (Beidas & Kendall, 2010), and (3) the degree to which these new treatments are sustainable (Kolko, Herschell, Costello, & Kolko, 2009).

The continued testing and refinement of EBTs for use with child physical abuse is an important development to ensure the relevance and utility of these interventions for a diverse array of settings, providers, and consumers. This evaluation study provides further information about one of these interventions, AF-CBT (Kolko & Swenson, 2002; see www.afcbt.org), which was regarded as a promising intervention in early reviews (Chadwick Center for Children and Families, 2004; Saunders, Berliner, & Hanson, 2003). This was determined based on an initial efficacy trial examining its two main approaches, individual CBT and family therapy (Kolko, 1996a, 1996b) and some empirical studies showing the contribution of caregiver cognition and affect to child-directed aggression (Mammen, Kolko, & Pilkonis, 2002, 2003). Since this early trial, the content in these two approaches has been integrated (Kolko & Swenson, 2002), adapted by community practitioners to establish its clinical and cultural appropriateness (Baumann & Kolko, 2003; Baumann, Kolko, Jones, Sturdivant, & Smith, 2006), and organized into a session guide with handouts. The primary content modules in AF-CBT were also found to be efficacious when adapted for use with clinically referred children with behavior disorders in two recent clinical trials (Kolko, Campo, Kelleher, & Cheng, 2010; Kolko et al., 2009). To more clearly reflect its focus on teaching skills as alternative options for solving personal and family problems, to better suit the diverse families who may receive the intervention, and to eliminate a term (“abuse”) that may obstruct treatment engagement, AF-CBT was recently renamed “Alternatives for Families: A Cognitive-Behavioral Treatment”. A brief summary of the key features of AF-CBT is found in Table 1.

To extend its modest evidence base to community settings, this exploratory study examines the use of AF-CBT by practitioners working in a child protection program who received one of the first formal trainings sponsored by the NCTSN in 2002. That training program was coordinated by a regional dissemination network organized by a child protection program affiliated with the NCTSN. Practitioners from this lead agency were trained by the developers of five EBTs used in the child welfare field. Training was first provided in TF-CBT and AF-CBT, then in PCIT and CPP, and later in CBITS. During and following these training programs, routine agency program monitoring data were collected by an independent evaluator, the caregiver, and the assigned clinician to document the treatment practices and client outcomes of all cases. This database provided a unique “naturalistic” perspective regarding the sustainability of EBTs and their role in promoting positive client outcomes based on existing practitioner and caregiver reports for all cases seen in the agency. Thus, this study evaluates the use and impact of AF-CBT, in relation to four other EBTs, to better understand the yield of these initial efforts to transport EBTs to routine practice settings. Four key issues related to treatment dissemination were examined: 1) is there any evidence showing the sustainable use of AF-CBT and the other EBTs several years after training was conducted?, 2) what is the level of overlap between AF-CBT and the other four EBTs, 3) when the unique content of the other four EBTs is controlled for, is there evidence for the relative effectiveness of AF-CBT content (general or abuse-specific) on clinical outcomes, and 4) to what extent does the use of AF-CBT content vary by key patient background and clinical characteristics?

Methods

Patient

Background demographics—Patients were 52 families receiving therapeutic services from 7 therapists in a child protection program located in the Western United States. Discharges for all cases occurred between January 2005 and June 2007. From a large database of all cases seen for treatment during this period, we identified all relevant cases who met the following selection criteria: 1) the child was “likely or very likely” to have

been physically abused as rated by parents at intake, 2) the child was assigned to an advanced clinician who received training in several EBTs for child abuse, and 3) the child received at least one session of intervention and had discharge data in the agency's records.

The average age of clients was 9.1 years ($SD = 3.7$; range: 3 to 17 years). There were 27 males (51.9%) and 25 females (48.1%). A total of 46 children (88.6%) were Caucasian, 2 were Asian (3.8%), 1 each was African-American (1.9%) and Native American (1.9%), and 2 were multiracial (3.8%). Most of the children (46 or 88.5%) lived in non-rural communities.

Maltreatment and clinical histories—At intake, children were rated by their primary caregivers (>80% were biological mothers) on 5-point Likert scales representing the likelihood of their having experienced or having committed several forms of maltreatment (1 = unlikely-no; 5 = likely-yes), which included the physical abuse item used as an inclusion criterion. For each maltreatment item, ratings that reflected likely-yes (5) and possibly-yes (4) were used to indicate a history, and ratings of unlikely-no (1) and possibly-no (2) were used to indicate no such history (the middle score of “unsure” was thus not included in these descriptive summaries). All of the children were perceived as having been physically abused. In addition, 38 (59.6%) children had a history of child sexual abuse ($M = 4.0$, $SD = 1.5$), 10 (19.2%) had a history of sexual abuse of another child ($M = 2.0$, $SD = 1.5$), and 16 (30.7%) had a history of physically attacking or trying to physically harm another child ($M = 2.4$, $SD = 1.6$). A total of 17 children (32.7%) were subject to severe or frequent corporal punishment ($M = 2.2$, $SD = 0.92$) and 26 (51.0%) had seen at least 1 incident of physical harm to a family member ($M = 1.7$, $SD = 2.0$). The mean abuse scale score on the Child Abuse Potential Inventory (CAPI; Milner, 1991) was 128.1 ($SD = 95.2$; range: 3 – 370); 32% of the sample had scores above the established clinical cutoff of 166. Nine children (17.3%) were developmentally disabled or delayed.

Treatment setting and therapists

The child protection program was a regional community-based program serving a range of clients through diverse services. Referrals were received from child protective services, pediatricians, attorneys, insurance companies, mental health therapists, and directly from parents contacting the clinic. Approximately 90% of the cases referred to the agency were voluntary self-referrals. The other 10% were mandated by the local child abuse authority. The agency's treatment protocol included standardized intakes consisting of individualized testing, formal treatment plans, and termination reports. Significant efforts were made to include parents/caregivers in all aspects of treatment. At termination, parents gave feedback to therapists as the basis for ongoing continuous quality improvement. The program also held a weekly staff meeting to review clinical issues and all parent feedback. Within this structure, therapists were permitted significant autonomy to adapt treatment to each case.

Seven primary agency practitioners participated in this study. In terms of their backgrounds, practitioners varied in age (28–61), gender (57% female), discipline and degree (57% were social workers with MSW degrees). All were Caucasian. These practitioners delivered an average of 26.4 hours ($SD = 12.8$) of services to this sample. Face to face visits with the child were most common ($M = 21.6$ hrs, $SD = 12.0$), followed by family therapy ($M = 9.7$, $SD = 7.4$), and parent/caregiver only visits ($M = 3.9$, $SD = 5.3$). On average, each therapist contributed about seven clients to this sample ($M = 7.57$; $Mdn = 7$; range: 3–15). The number of patients per staff closely corresponded to the staff member's number of years of experience working in the program and was not significantly related to the amount of AF-CBT content used by that staff member.

Training in and use of EBTs

The program operated a SAMHSA grant from 2001 to 2004 to disseminate several EBTs to practitioners from a 7-state region working with underserved populations. As part of this training program, 7 senior therapists and the program manager (KG) received training from the developers of each EBT. They first learned TF-CBT and AF-CBT, followed next by PCIT and CPP, and then CBITS. Staff received a 2-day workshop and 6 to 12 months of follow-up case consultation calls with the trainers of each EBT. These staff also continued to supervise and train their own teams of mental health professionals on TF-CBT and PCIT based on community need, once the grant had ended.

Routine agency assessment procedures

An independent, trained clinician administered a structured interview and standardized scales to capture the nature and severity of the child's problems, reviewed background history data, and prepared a case formulation. Parents also completed an intake history questionnaire. Some of the same intake measures were collected at discharge to help with aftercare plans. Several additional items were completed by parents and therapists at discharge to assess perceptions of change on key child and parent functioning and adjustment measures.

Intake (pretreatment) measures

Caregivers completed the CAPI to evaluate the overall level of risk for child physical abuse (Milner, 1991). The CAPI has excellent psychometric properties and a suggested clinical cutoff of 166. Using 5-point Likert scales (*1 = likely-no; 5 = likely-yes*), caregivers indicated the extent to which they believed their children had the following victimization or trauma exposure experiences: sexual abuse, physical abuse, being subject to severe or frequent physical punishment, exposure to a family member being physically attacked or harmed, and sexually abusing another child.

Measures of clinical functioning at intake and discharge: Standardized rating scales Child Behavior Checklist(CBCL; Achenbach, 1991)—The CBCL was completed by caregivers at both time points. The CBCL has excellent psychometric properties (reliability, concurrent and treatment validity) and has been used in several treatment outcome studies in child welfare (Cohen et al., 2004; Kolko, 1996a). We examined higher order scales (*t*-scores) reflecting internalizing and externalizing problems, as well as social competence.

Trauma Symptom Checklist for Children (TSCC; Briere, 1996)—Children completed the TSCC as an index of the current severity of several trauma-related symptoms. The TSCC provides norms according to age and gender (*t*-score $M = 50$), as well as clinical cutoff scores. The child is asked to indicate how often each item happens to him or her using a 4-point scale (*0 = never; 1 = sometimes; 2 = lots of times; 3 = almost all the time*). In general, studies of the TSCC have demonstrated modest intercorrelations among subscales, good internal consistency, and good concurrent and predictive validity (Lanktree & Briere, 1995; Nilsson, Wadsby, & Svedin, 2008; Sadowski & Friedrich, 2000). We examined anxiety, depression, anger, and posttraumatic stress scores due to their relevance to child physical abuse.

Child Sexual Behavior Inventory (CSBI; Friedrich et al., 2001)—Children also completed the CSBI which includes 38 items reflecting sexual interest and activity. The CSBI has five factors (e.g., sexual interests, deviant sexual activities) which possess good reliability and validity. We examined the overall *t*-scale score for the entire measure.

Expectations Test (ET; Gully, 2003)—The ET is a child self-report measure of expectations in response to 16 ambiguous photographs of children designed to evaluate concerns about abuse. Children ages 4 through 17 are asked to describe how they think the child will feel, what will happen to the child, and if the child can control what will happen to the child in each photograph. Answers are summed to reflect the child's expectations for certain emotions and experiences in social situations. Psychometric evaluation reveals good reliability and internal consistency, sensitivity and specificity data for common trauma histories, and some evidence for sensitivity to therapeutic change (Gully, 2000, 2003). We report expectation scores for a subset of experiences relevant to child physical abuse that were not redundant with the TSCC scales (i.e., scared, physical harm, personal efficacy in interpersonal situations).

Social Behavior Inventory (SBI; Gully, 2001)—The SBI is a 30-item checklist of interpersonal behaviors rated by parents that yields scores on five factors (e.g., aversive-miscommunication, prosocial-genuine). The SBI shows good correlations with physical abuse and physically assaultive behavior, and with concurrent clinical measures, including the CBCL and CSBI. We examined the aversive-miscommunication score which reflects the degree to which a child makes coercive or negative comments and maintains misattributions, and the overall social competence score which reflects the child's overall level of positive interpersonal behavior (sum of prosocial minus aversive behavior items).

Measures of adjustment outcome at discharge: Therapist and parent ratings

Therapists—Therapists rated each child's perceived level of change from intake to termination on six adjustment items using 5-point Likert scales (*1 = definitely not true; 5 = definitely true*). The items reflected common concerns for which such children were referred (e.g., child is less scared/sad and happier, child is safer from harm, child is better able to have friends without harming them, child is more likely not to violate the privacy and/or private parts of others, child has been physically assaultive with another child, child has been sexually aggressive with another child). They also rated parental change from intake to termination on three outcomes (i.e., parent became more competent, level of effort by parent to help the child, capacity of the parent to attend to the needs and best interests of the child). In terms of overall treatment response, therapists' ratings were obtained to reflect the extent to which their child's prognosis was positive (1–5 point scale) and therapy goals were met (1–3 point scale). They also indicated whether the case was viewed as successful or premature/unsuccessful at termination.

Parents—Parents evaluated the perceived level of change shown by their child from intake to termination in 5 related clinical areas on the same 5-point Likert rating scales (*1 = definitely not true; 5 = definitely true*). They rated 4 of the same items rated by therapists and 1 other item (i.e., child shows good mental health and functioning). Parents also rated their own treatment response on 3 items using a similar 5-point Likert scale (i.e., services helped me as the child's parent/caregiver, I was satisfied with services).

Measures of the use of each evidence-based treatment

Content selection for each EBT—The agency database included a structured rating scale to document the use of all key content in the five EBTs that was delivered by each practitioner in a given case. To identify separate EBT scores designed to reflect this content, the developers of each EBT were asked to identify items that reflected the core content and methods of their respective treatment approaches (i.e., AF-CBT, TF-CBT, PCIT, CPP, CBITS). The information generated a total of 43 specific content items. Each treatment developer then rated the extent to which each of these items was central or essential to his/her treatment approach (*1 = definitely no; 5 = definitely yes*). For the content of AF-CBT,

we created two separate scores, one reflecting general content (11 items), and the other reflecting abuse-specific content (14 items).

Development of EBT content scores—Using the same list of 43 specific content items, we created scales reflecting the amount of content in each EBT that was used in each treatment case by identifying items that each treatment developer rated as “definitely” (i.e., 5) central to his/her EBT. Therefore, each EBT had its own list of items that the treatment developer believed was central to the treatment. Understandably, the item lists for each EBT were not mutually exclusive because, for example, items could have been rated as “definitely” central to both AF-CBT and TF-CBT. Therefore, we created 2 indicators of treatment use. One indicator was based on all items identified as central to each EBT; thus, there could be considerable overlap in the content of each EBT, since these items were non-exclusive (“full content score”). The second indicator was designed to eliminate any overlap with the central content items identified for AF-CBT. To create this score for the 4 other EBTs, we included all items that were “definitely” central to each respective EBT, but which were not already included in our indicator of AF-CBT. This resulted in a score for each EBT that had no overlap with the content of AF-CBT (“unique content score”).

We used the item lists for the overall and unique content scores to measure the extent to which therapists used each EBT in each treatment case. At discharge, therapists rated the extent to which each item identified for each EBT indicator was central to his/her treatment approach with a given family. Using these therapist ratings, we created a set of treatment use variables that reflected how much content of each EBT was used in each treatment case.

Because of the large number of content items and highly diverse content of AF-CBT, we also created two subscale scores to reflect the two main types of content reflected in this EBT. One reflected “General” content, which consisted of common psychosocial skills or concepts (e.g., teaching emotion regulation, challenging thoughts, problems-solving skills training), and the other reflected “Abuse-specific” content, which consisted of skills or concepts that focused more specifically on addressing a maltreatment/abuse history (e.g., safety plan to prevent re-abuse, psychoeducation about force/abuse, clarification).

Practitioner impressions of AF-CBT at 5-year follow-up

Practitioner impressions of AF-CBT were collected 5 years after the conclusion of the learning collaborative to assess their overall views about its use, relevance, and clinical benefits on 5-point Likert scales. This information was based on their collective experience using AF-CBT with their entire caseload over a long follow-up interval.

Results

Description of use of all evidence based treatments

Full content—Table 2 provides descriptive statistics for AF-CBT and the other 4 EBT content use scores. The mean use ratings for the individual items in each score are also presented. Given differences in the number of items in each scales, the overall means ranged from 96.9 (AF-CBT) to 30.1 (CBITS), with means found in the middle of this range for CPP (61.8), TF-CBT (60.1), and PCIT (50.5). All 5 EBTs had high internal consistencies (α 's = .74 – .86). Scores for these EBTs revealed similar average use ratings per item, based on a 5-point scale. Approximately 50% to 60% of all of the components in each of these 5 EBTs were rated as being “definitely used” across the 52 cases that received treatment. The results show a comparable overall level of use of the item content in all 5 of these EBTs, though there was also modest variability in the use of each EBT across the treatment cases.

Unique content—The descriptive statistics for the unique content scores of the four EBTs that did not overlap with any of the central content of AF-CBT are also presented in Table 2. The internal consistencies of these 4 scores were generally high, except for the TF-CBT score which was based on only 4 items. Scores for all four EBTs indicated average use and frequency of use ratings similar to those found for the overall content of each EBT.

Description of the use of AF-CBT content subscales and individual items

General and abuse-specific content—The AF-CBT General and Abuse-specific component scores are also shown in Table 2. The 2 scores had high internal consistencies, respectively (α 's = .84, .76). The mean use ratings per item were fairly high and comparable for both component scores. However, clinicians were more likely to definitely use the General content items than the Abuse-specific content items. Both scores showed modest variability in their relative use across cases.

Individual items—To further explore the specific AF-CBT content that clinicians applied, we computed the mean use ratings for each AF-CBT treatment procedure and the proportion of cases with which each was definitely used. As shown in Table 3, the three items with the highest use ratings fell on the General subscale (i.e., having a parent or child involved in treatment, teaching behavioral skills to parents and children, teaching affect regulation skills to parents and children). As this table shows, most of the AF-CBT items were used on a frequent basis, even though there was extensive variability in their use in any given case. In contrast, several items with the lowest use ratings were in the Abuse-specific subscale (i.e., discussion of a no-force agreement, discussing incidents involving the use of physical aggression or force, identifying/challenging abuse or aggression related cognitions).

Correlations between the content of AF-CBT and the other EBTs

Full content—Because of the overlap in items identified as central to several EBTs, we examined correlations between the full content scores for AF-CBT and the other 4 EBTs. AF-CBT was highly related to TF-CBT at $r = .78$ ($p < .001$), PCIT at $r = .48$ ($p < .001$), and CPP at $r = .77$ ($p < .001$), but was unrelated to CBITS $r = .07$ (ns).

In terms of the 2 AF-CBT components, the General content was highly related to TF-CBT at $r = .84$, PCIT at $r = .53$, and CPP at $r = .64$ (all $ps < .001$), but was minimally related to CBITS at $r = .23$ (ns). The Abuse-specific content was highly related to TF-CBT at $r = .41$ ($p < .001$) and CPP at $r = .64$ ($p < .001$), but less so with PCIT at $r = .29$ ($p < .05$) and CBITS at $r = -.15$ (ns). The AF-CBT General and Abuse-specific components scores were moderately related to each other at $r = .35$ ($p < .01$).

Unique content—Given the high overlap in the content of AF-CBT and 3 of the other EBTs, we created separate scores for each of the EBTs that combined all treatment content items that were *not* part of AF-CBT. These items reflected the “unique content” of TF-CBT, PCIT, CPP, and CBITS, relative to the content of AF-CBT. As expected, AF-CBT was modestly related to the unique content of TF-CBT at $r = .31$ ($p < .01$), PCIT at $r = .37$ ($p < .01$), and CPP at $r = .46$ ($p < .001$), but was inversely related to CBITS at $r = -.35$ ($p < .01$).

In terms of the 2 AF-CBT content subscales, the General content score had lower positive correlations with the unique content of TF-CBT at $r = .41$ ($p < .01$), PCIT at $r = .43$ ($p < .01$), and CPP at $r = .56$ ($p < .001$), and was negatively related to CBITS at $r = -.20$ (ns). In contrast, the Abuse-specific content scale was unrelated to the unique content of TF-CBT at $r = .11$ (ns), PCIT at $r = .23$ (ns), and CPP at $r = .20$ (ns), and was negatively related to the unique content of CBITS at $r = -.41$ ($p < .01$). Based on the minimal level of overlap found

between the content of the 2 AF-CBT content subscales and the content of the other 4 EBTs, we evaluated these 2 scores in all remaining analyses.

Relationship between AF-CBT general or abuse-specific content and clinical outcomes: Controls for baseline outcome variable and the unique content of other EBTs

The AF-CBT General and Abuse-specific content scores were examined as predictors of several outcome measures of interest using general linear modeling (GLM) in SPSS 16.0. In all of our analyses, we included scores of the unique content for each of the four EBTs and each baseline measure of the outcome variable, when available. This was designed to provide a more stringent test of the effectiveness of AF-CBT by controlling for the influence of the unique content found in the four other EBTs and any baseline measures.

Standardized rating scales—Table 4 presents the means and SD's for all of the measures collected pre- and posttreatment, and the results of our GLM analyses. Greater use of AF-CBT General content was not significantly related to any outcome variables. However, greater use of AF-CBT Abuse-specific content was related to significant decreases on CBCL externalizing problems, TSCC anxiety scores, and TSCC anger scores, and significant increases in social competence on the SBI.

For benchmarking purposes, we compared the pre- and posttreatment means on the CBCL externalizing and internalizing scales from our sample to a sample from a previous clinical trial (Kolko, 1996a). The group means on these two measures at pretreatment were generally comparable. The overall level of pre- to posttreatment improvement on the externalizing scale was 7.8% for the original individual CBT protocol (65.3, 60.2), <1.0% for the original family-systems protocol (64.2, 63.9), and 9.6% for the current sample (see Table 4). Likewise, the level of improvement on the internalizing scale was 9.7% for the original CBT protocol (60.0, 54.1), 3.2% for the original family-systems protocol (61.6, 60.3), and 9.6% for the current sample.

Discharge ratings—Table 5 presents the means and standard deviations for the ratings collected at posttreatment. Therapist and parent ratings of the child being less scared and being safer from harm were highly related to each other ($r \geq .50$), so we created mean scores that averaged therapist and parent reports on each of these 2 outcome variables. Therapist and parent ratings on the other outcome variables were not as consistent ($r \leq .29$), so we did not aggregate them. Greater use of AF-CBT General content was related to higher therapist ratings of the child's prognosis and higher parent ratings of being helped by treatment. Greater use of AF-CBT Abuse-specific content was related to higher aggregate mean ratings of the child being less scared/sad and happier and being safer from harm, having a better prognosis as rated by therapists, and being better able to have friends without physically harming them and to respect others' privacy or private parts based on parent ratings. A total of 50 of these 52 cases (96.3%) were viewed by therapists as having a successful outcome at termination.

Variation in AF-CBT content use by case background characteristics

Analysis of Variance (ANOVAs) was conducted to examine the relationship between several case background characteristics and the use of AF-CBT General and Abuse-specific content. The analyses revealed no significant differences in the use of either type of content based on child age (younger [3–8 years old] versus older [9–17 years old]), gender, ethnicity (minority versus non-minority), history of developmental delay, geographic location of residence (rural versus suburban/urban), CAPI cutoff score (above versus below 166), history of child perpetration or child sexual abuse ($ps = .87$ to $.08$). As expected, Abuse-specific content was more prominently used in cases with versus without (31.6 versus 25.9)

exposure to harsh corporal punishment [$F(1, 51) = 7.9, p < .001$] and in cases with versus without (31.9 versus 24.2) a history of observing physical aggression in the family [$F(1, 50) = 17.8, p < .0001$]. In addition, General content was less prominently used in cases with versus without (64.4 versus 71.6) a prior history of foster care [$F(1, 51) = 4.65, p < .05$]. AF-CBT General or Abuse-specific content was not significantly related to baseline levels of child anxiety, anger, traumatic stress, or externalizing behavior.

Relationship between intake date and treatment outcome variables

Given the 3-year period during which these data were collected, we sought to determine whether there was a significant change over time in the severity of the cases upon intake based on the clinical assessment scales in Table 4, the use of AF-CBT General and Abuse-specific treatment content, and clinical outcome on these scales. We computed correlations based on the full sample to examine the relationship between children's intake date and their levels on these measures of treatment and outcome. The only significant relationship with the date at which treatment started was found for the AF-CBT Abuse-specific content scale ($r = .36, p < .01$), indicating that children receiving treatment later in the study received more AF-CBT Abuse-specific treatment content than did children receiving treatment earlier in the study.

Practitioner impressions of AF-CBT at 5-year follow-up

Five years after the conclusion of the learning collaborative in AF-CBT, all of the practitioners reported using AF-CBT often or very much of the time ($M = 4.5/5.0$), thought it was relevant to the problems targeted in treatment by these cases ($4.8/5.0$), and believed that its content was helpful in addressing the clinical problems targeted in treatment ($4.5/5.0$). No practitioner ratings were below 4.0 out of 5.0 on any of these items.

Discussion

This report describes the sustained application and short-term outcomes of "Alternatives for Families: A Cognitive-Behavioral Treatment" (AF-CBT) among families presenting with child physical abuse who received treatment in a community-based child protection program. These cases were assessed by the program between two and five years after practitioners received an initial training program in AF-CBT and four other EBTs that was conducted under the auspices of the NCTSN in 2002. Results identified the most and least frequently used AF-CBT General and Abuse-specific content items, a modest level of overlap with other EBT content, and a significant relationship between the amount of AF-CBT General and Abuse-specific content delivered to each case and several clinical and functional improvements in both children and caregivers. In documenting the preliminary clinical benefits of AF-CBT as routinely applied by community practitioners serving physically abused children and their families, these novel data are discussed in the context of key developments in this treatment model and dissemination literature (Kolko et al., in press).

Given the relative absence of empirical evidence regarding the long-term adoption of EBTs in the child welfare system, one aim of this paper was to simply document the use of AF-CBT practices by agency clinicians who had been trained in the model between three and five years earlier. Using the agency's routine data collection system, we found that clinicians reported that they had "definitely used" 57% of all of the AF-CBT content items with this clinical sample and a high level of use per treatment practice item. Insofar as the average use ratings per item for the other four EBTs was about the same, these findings suggest that AF-CBT and the other EBTs had been incorporated and reasonably maintained in the practitioners' repertoires well after training in those models had ended. These ratings

paralleled or exceeded those reported for the use of several treatment orientations (e.g., CBT, behavioral, family) by a national cohort of practitioners who attended a training workshop on TF-CBT under the auspices of the NCTSN (Kolko, Cohen et al., 2009) and are consistent with reports that community practitioners can apply TF-CBT and CBITS with integrity (Hoagwood, Olin et al., 2007; Jaycox et al., 2010). Of course, there was still modest variability in the overall use of AF-CBT across cases, which may be due, in part, to practitioner's decisions to integrate AF-CBT with other EBTs in a given case.

The results also provide information about the individual AF-CBT practices that were used the most or the least with physically abusive families. Item content used the most fell on the General content score, and included both process or structure oriented items (e.g., having a parent and child involved in treatment) and specific skills-training functions (e.g., teaching behavioral or affect regulation skills). Item content used the least primarily fell on the Abuse-specific content score, and included general discussion of the details of the referral incident or related forms of physical force/discipline or suggestions for reducing the frequency of such acts (e.g., development of a no-force agreement, discussion of aggressive incidents, identification or challenge of abuse-related cognitions). A recent study of practitioners who sought a training in TF-CBT likewise reported less use of certain "trauma-focused" treatment methods (e.g., exposure) designed to address the child's traumatic reactions (Kolko, Cohen et al., 2009). This may reflect some reluctance to use methods that often elicit patient discomfort in an effort to ultimately promote symptomatic relief or to challenge patients in ways that might elicit and address conflict during the session.

The two AF-CBT content scores (General, Abuse-specific) were moderately related and differentially associated with the four other EBTs. The General score was highly related to the use of TF-CBT and CPP, modestly related to the use of PCIT, and generally unrelated to the use of CBITS. The Abuse-specific score also was highly related to CPP, but was modestly related to TF-CBT, minimally related to PCIT, and minimally but inversely related to CBITS. This comparison provides novel information about how these two types of AF-CBT content show varied patterns of similarities and differences with the content of the other EBTs. Certainly, the presence of modest overlap among certain EBTs (Silverman et al., 2008) is not surprising given their use of CBT principles and methods, inclusion of both parents and children, and application to common treatment issues (e.g., behavior management). At the same time, greater overlap was found for the General (vs. Abuse-specific) content in AF-CBT, suggesting that the latter content may be more unique to AF-CBT.

The two AF-CBT content scores also were differentially related to several perceived clinical outcomes at discharge. On standardized child clinical dysfunction measures, greater use of AF-CBT General content was related to a near-significant decrease in child ratings of the severity of the child's anger problems, whereas greater use of AF-CBT Abuse-specific content was related to significant decreases in parent-reports of the child's externalizing behavior problems, child-rated anxiety and anger problems, and parent reports of the child's social competence and parental use of aversive-miscommunication. The levels of improvement in externalizing behavior and anger-related problems are consistent with the AF-CBT model (Kolko, 1996a; Kolko & Swenson, 2002) and compare to those found in the initial randomized clinical trial of AF-CBT (Kolko, 1996a). In terms of the outcome studies conducted with the other EBTs, significant group differences in externalizing behavior have been reported with some EBTs (Lieberman, Van Horn, & Ozer, 2005), but not others (Chaffin et al., 2004; Cohen et al., 2004). That the Abuse-specific content was related to reduced self-reported anxiety is also consistent with the findings of other EBTs (Cohen & Mannarino, 1996; Deblinger, Lippmann, & Steer, 1996).

Results on standardized scales were paralleled somewhat by the parent and clinician ratings of the child's and parent's improvement from intake to discharge. The most robust improvement associated with AF-CBT Abuse-specific content was found on aggregate ratings indicating that the child had become less scared/sad and happier, and more safe from harm, therapist and parent ratings of the child being better able to have friends without harming them, and therapist or parent ratings indicating that the child was more likely not to violate others' privacy or private parts and had a better prognosis. Interestingly, parent's perceptions of the degree to which they were helped by treatment were related to their exposure to AF-CBT General content only. Taken together, the two informants confirmed that the Abuse-specific content scores were related to improvements in children's safety or protection from harm, general mental health, and peer relations, all of which are consistent with the methods and outcomes of AF-CBT (see Kolko & Swenson, 2002). It is not clear if General content may be more related to changes in parental behavior, whereas Abuse-specific content may be more related to changes in children's clinical sequelae/dysfunction (Deblinger et al., 1996). In complementing the clinical rating scales, these novel data suggest that AF-CBT conveys benefits in children's clinical functioning, well-being, and safety/welfare.

Our examination of factors that could influence how much therapists focused on specific treatment content in sessions revealed that the use of AF-CBT General and Abuse-specific content was robust and consistently applied across a range of diverse client characteristics, including child age, gender, ethnicity, and developmental delay, history of child perpetration or child sexual abuse, household income, rural (vs. suburban/urban) residence, and parental abuse severity on the CAPI. As expected, those cases where children directly experienced or witnessed higher levels of physical aggression prior at intake received a higher level of both General and Abuse-specific treatment than those without such histories. These results are consistent with those from our efficacy trial (Kolko, 1996b) and the outcome studies of other EBTs (Chaffin et al., 2004; Cohen et al., 2004; Stein et al., 2003). It is also important to note that the agency's innovative efforts to learn, apply, and teach these EBTs may have been a significant contributor to their consistent use of these methods over time.

The limitations of this study deserve mention. First, the study is neither a clinical trial nor a controlled evaluation of the use of a single EBT, so it lacks the methodological rigor of an outcome study (e.g., randomization, separate treatment conditions for comparison, research infrastructure, etc.). The primary purpose of this study, however, was to examine several outcomes associated with the receipt of AF-CBT when evaluated in the context of the "unique" content of four other EBTs in a child protection center. Moreover, some of the outcomes reflected therapist and parent perceptions which could not be verified using independent observations. Since there were no behavioral data on treatment fidelity, it was not possible to document the quality or level of sustainability of any EBT. Likewise, the collection of behavioral observations would have extended parental self-reports about child and parent progress. Finally, the low number of available cases provided less than optimal power for some analyses.

In summary, this study provides initial empirical data evaluating the sustained use and effectiveness of EBTs for families presenting with histories of child abuse and neglect that were applied by community practitioners who were trained several years earlier in these approaches (AF-CBT, TF-CBT, PCIT, CCP, CBITS). In particular, we documented the use of several AF-CBT General and Abuse-specific practices with children who had a history of child physical abuse, among other traumatic experiences, and their relationship to several clinical and adjustment outcomes. Such information is needed to facilitate our understanding of the impact of early community dissemination efforts in the child welfare system and the degree to which practitioners actually apply newly learned EBT methods and produce with

good outcome (see Cohen & Mannarino, 2008). Of course, future research should begin to document the decision processes that clinicians employ to select specific procedures from one or more EBTs and the implication of these treatment variations on family outcome (Kolko et al., in press). In addition to characterizing the long-term sustainability of these methods, we also documented the presence of considerable overlap in the content of several EBTs used to treat childhood abuse/trauma, suggesting that there are core components that are common to these approaches. Further examination of these elements might prove worthwhile, as has been the case in other areas (Chorpita, Becker, & Daleiden, 2007; Garland, Hawley, Brookman-Frazee, & Hurlburt, 2008). Given that dissemination efforts require considerable resources and commitments (Bruns et al., 2008), additional investigations of the application, utility, and cost-effectiveness of alternative EBTs for child abuse and neglect are needed to ensure that the investments being made by treatment developers and community agencies yield acceptable clinical returns.

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References

- Achenbach, TM. Integrative guide for the 1991 CBCL/4-18, YSR, and TRF profiles. Burlington, VT: University of Vermont, Department of Psychiatry; 1991.
- Baumann, BL.; Kolko, DJ. Raising in-home service effectiveness. University of Pittsburgh; Pittsburgh: 2003.
- Baumann, BL.; Kolko, DJ.; Jones, H.; Sturdivant, M.; Smith, W. Improving the cultural relevancy of an evidence based intervention for physically abusive families. University of Pittsburgh; Pittsburgh: 2006.
- Beidas RS, Kendall PC. Training therapists in evidence-based practice: A critical review of studies from a systems-contextual perspective. *Clinical Psychology: Science and Practice*. 2010; 17(1):1–30. [PubMed: 20877441]
- Briere, J. Trauma Symptom Checklist for Children: Professional manual. Odessa, Florida: Psychological Assessment Resources, Inc; 1996.
- Brunk M, Henggeler SW, Whelan JP. Comparison of multisystemic therapy and parent training in the brief treatment of child abuse and neglect. *Journal of Consulting and Clinical Psychology*. 1987; 55:171–178. [PubMed: 3571669]
- Bruns EJ, Hoagwood KE, Rivard JC, Wotring J, Marsenich L, Carter B. State implementation of evidence-based practice for youths, part II: Recommendations for research and policy. *Journal of the American Academy for Child and Adolescent Psychiatry*. 2008; 47(5):499–504.
- Chadwick Center for Children and Families. Closing the quality chasm in child abuse treatment: Identifying and disseminating best practices. San Diego: Chadwick Center for Children and Families; 2004.
- Chaffin M, Silovsky JF, Funderburk B, Valle LA, Brestan EV, Balachova T, et al. Parent-child interaction therapy with physically abusive parents: Efficacy for reducing future abuse reports. *Journal of Consulting & Clinical Psychology*. 2004; 72(3):500–510. [PubMed: 15279533]
- Chaffin, M.; Silovsky, JF.; Funderburk, B.; Valle, LA.; Brestan, EV.; Balachova, T., et al. Physical abuse treatment outcome project: Application of Parent-Child Interaction Therapy (PCIT) to physically abusive parents. Washington, DC: US Department of Health and Human Services, The

Administration on Children, Youth, and Families, Children's Bureau, Office of Child Abuse and Neglect; 2003.

- Chamberlain P, Brown C, Saldana L, Reid J, Wang W, Marsenich L, et al. Engaging and recruiting counties in an experiment on implementing evidence-based practice in California. *Administration and Policy in Mental Health and Mental Health Services Research*. 2008; 35(4):250–260.10.1007/s10488-008-0167-x [PubMed: 18302015]
- Chorpita BF, Becker KD, Daleiden EL. Understanding the common elements of evidence-based practice: Misconceptions and clinical examples. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2007; 46:647–652. [PubMed: 17450056]
- Cohen JA, Deblinger E, Mannarino AP, Steer RA. A multisite randomized controlled study of sexually abused, multiply traumatized children with PTSD: Initial treatment outcome. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2004; 43:393–402. [PubMed: 15187799]
- Cohen JA, Jaycox L, Walker D, Mannarino AP, Langley A, DuClos J. Treating traumatized children after Hurricane Katrina: Project Fleur-de Lis™. *Clinical Child and Family Psychology Review*. 2009; 12(1):55–64.10.1007/s10567-009-0039-2 [PubMed: 19224365]
- Cohen JA, Mannarino A. Disseminating and implementing trauma-focused CBT in community settings. *Trauma, Violence, and Abuse*. 2008; 9(4):214–226.
- Cohen JA, Mannarino AP. Factors that mediate treatment outcome in sexually abused preschool children. *Journal of the American Academy of Child & Adolescent Psychiatry*. 1996; 35(10):1402–1410. [PubMed: 8885595]
- Dean KL, Langley AK, Kataoka SH, Jaycox LH, Wong M, Stein BB. School-based disaster mental health services: Clinical, policy, and community challenges. *Professional Psychology: Research and Practice*. 2008; 39(1):52–57.
- Deblinger E, Lippmann J, Steer R. Sexually abused children suffering posttraumatic stress symptoms: Initial treatment outcome findings. *Child Maltreatment*. 1996; 1:310–321.
- Franco E, Soler RE, McBride M. Introducing and evaluating Parent-Child Interaction Therapy in a system of care. *Child and Adolescent Psychiatric Clinics of North America*. 2005; 14:351–366. [PubMed: 15694790]
- Friedrich WN, Fisher JL, Dittner CA, Acton R, Berliner L, Butler J, et al. Child Sexual Behavior Inventory: Normative, psychiatric, and sexual abuse comparisons. *Journal of the American Professional Society on the Abuse of children*. 2001; 6(1):37–49.
- Garland AF, Hawley KM, Brookman-Frazee L, Hurlburt M. Identifying common elements of evidence-based psychosocial treatments for children's disruptive behavior problems. *Journal of the American Academy for Child and Adolescent Psychiatry*. 2008; 47:505–514.
- Gully KJ. Initial development of the expectations test for children: A tool to investigate social information processing. *Journal of Clinical Psychology*. 2000; 56(12):1551–1563. [PubMed: 11132570]
- Gully KJ. The Social Behavior Inventory for children in a child abuse treatment program: Development of a tool to measure interpersonal behavior. *Child Maltreatment*. 2001; 6(3):260–270. [PubMed: 11471633]
- Gully KJ. Expectations Test: Trauma scales for sexual abuse, physical abuse, exposure to family violence, and posttraumatic stress. *Child Maltreatment*. 2003; 8(3):218–229. [PubMed: 12934639]
- Herschell AD, McNeil C, Urquiza A, McGrath J, Zebbell N, SGT, et al. Evaluation of a treatment manual and workshops for disseminating, parent-child interaction therapy. *Administration and Policy in Mental Health and Mental Health Services Research*. 2009; 36:63–81. [PubMed: 19016321]
- Hoagwood KE, Olin SS, Kerker BD, Kratochwill TR, Crowe M, Saka N. Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional & Behavioral Disorders*. 2007; 15(2):66–92.
- Hoagwood KE, Vogel JM, Levitt JM, D'amico PJ, Paisner WI, Kaplan SJ. Implementing an evidence-based trauma treatment in a state system after September 11: The CATS Project. *Journal of American Academy of Child & Adolescent Psychiatry*. 2007; 46(6):773–779.10.1097/chi.0b013e3180413def

- Jaycox LH, Cohen JA, Mannarino AP, Walker DWL, Audra K, Gegenheimer KL, Scott M, et al. Children's mental health care following Hurricane Katrina: A field trial of trauma-focused therapies. *Journal of Traumatic Stress*. 2010; 23(2):223–231. [PubMed: 20419730]
- Kolko DJ. Clinical monitoring of treatment course in child physical abuse: Psychometric characteristics and treatment comparisons. *Child Abuse & Neglect*. 1996a; 20(1):23–43. [PubMed: 8640423]
- Kolko DJ. Individual cognitive-behavioral treatment and family therapy for physically abused children and their offending parents: A comparison of clinical outcomes. *Child Maltreatment*. 1996b; 1:322–342.
- Kolko DJ, Campo JV, Kelleher K, Cheng Y. Improving access to care and clinical outcome for pediatric behavioral problems: A randomized trial of a nurse-administered intervention in primary care. *Journal of Developmental & Behavioral Pediatrics*. 2010; 31(5):393–404.10.1097/DBP.0b013e3181dff307 [PubMed: 20495474]
- Kolko DJ, Cohen JA, Mannarino AP, Baumann B, Knudsen K. Community treatment of child sexual abuse: A survey of practitioners in the National Child Traumatic Stress Network. *Administration and Policy in Mental Health and Mental Health Services Research*. 2009; 36(1):37–49. [PubMed: 18568396]
- Kolko DJ, Dorn LD, Bukstein OG, Pardini DA, Holden EA, Hart JD. Community vs. clinic-based modular treatment of children with early-onset ODD or CD: A clinical trial with three-year follow-up. *Journal of Abnormal Child Psychology*. 2009; 37:591–609. [PubMed: 19221871]
- Kolko DJ, Herschell AD, Costello A, Kolko RP. Child welfare recommendations to improve mental health services for children who have experienced abuse and neglect: A national perspective. *Administration and Policy in Mental Health and Mental Health Services Research*. 2009; 36(1): 50–62.10.1007/s10488-008-0202-y [PubMed: 19127426]
- Kolko DJ, Hoagwood KE, Springgate BF. Treatment research for Trauma/PTSD in children and youth: Moving from efficacy to effectiveness. *General Hospital Psychiatry*. (in press).
- Kolko, DJ.; Kolko, RP. Psychological impact and treatment of child physical abuse. In: Jenny, C., editor. *Child abuse and neglect: Diagnosis, treatment and evidence*. New York: Elsevier, Inc; (in press)
- Kolko, DJ.; Swenson, CC. *Assessing and treating physically abused children and their families: A cognitive behavioral approach*. Thousand Oaks, CA: Sage Publications; 2002.
- Lanktree CB, Briere J. Outcome of therapy for sexually abused children: A repeated measures study. *Child Abuse & Neglect*. 1995; 19:1145–1155. [PubMed: 8528820]
- Lieberman AF, Ippen CG, Van Horn P. Child-parent psychotherapy: 6-month follow-up of a randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2006; 45(8):913–918. [PubMed: 16865033]
- Lieberman AF, Van Horn P, Ozer EJ. Preschooler witnesses of marital violence: Predictors and mediators of child behavior problems. *Development and Psychopathology*. 2005; 17(2):385–396. [PubMed: 16761550]
- Mammen OK, Kolko DJ, Pilkonis PA. Negative affect and parental aggression in child physical abuse. *Child Abuse & Neglect*. 2002; 26:407–424. [PubMed: 12092806]
- Mammen OK, Kolko DJ, Pilkonis PA. Parental cognitions and satisfaction: Relationship to aggressive parental behavior in child physical abuse. *Child Maltreatment*. 2003; 8(4):288–301. [PubMed: 14604176]
- McHugh RK, Barlow DH. The dissemination and implementation of evidence-based psychological treatments: A review of the current efforts. *American Psychologist*. 2010; (65):73–84. [PubMed: 20141263]
- Milner JS. Physical child abuse perpetrator screening and evaluation. *Criminal Justice and Behavior*. 1991; 18:47–63.
- Nilsson D, Wadsby M, Svedin CG. The psychometric properties of the Trauma Symptom Checklist for Children (TSCC) in a sample of Swedish children. *Child Abuse & Neglect*. 2008; 32(6):627–636. [PubMed: 18584867]

- Price JM, Chamberlain P, Landsverk J, Reid JB, Leve LD, Laurent H. Effects of a foster parent training intervention on placement changes of children in foster care. *Child Maltreatment*. 2008; 13:64–75. [PubMed: 18174349]
- Runyon M, Deblinger E, Schroeder CM. Pilot evaluation of outcomes of combined parent-child cognitive-behavioral group therapy for families at risk for child physical abuse. *Cognitive and Behavioral Practice*. 2009; 16:101–118.
- Sadowski C, Friedrich WN. Psychometric properties of the Trauma Symptom Checklist for Children (TSCC) with psychiatrically hospitalized adolescents. *Child Maltreatment*. 2000; 5(4):364–372. [PubMed: 11232264]
- Saunders, BE.; Berliner, L.; Hanson, RF. Child physical and sexual abuse: guidelines for treatment (Final report: January 15, 2003). Charleston, SC: National Crime Victims Research and Treatment Center; 2003.
- Silverman WK, Ortiz CD, Viswesvaran C, Burns BJ, Kolko DJ, Putnam FW, et al. Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child and Adolescent Psychology*. 2008; 37(1):156–183. [PubMed: 18444057]
- Stein BD, Jaycox LH, Kataoka SH, Wong M, Tu W, Elliott MN, et al. A mental health intervention for schoolchildren exposed to violence: A randomized controlled trial. *Journal of the American Medical Association*. 2003; 290(5):603–611. [PubMed: 12902363]
- Swenson CC, Chaffin M. Beyond psychotherapy: Treating abused children by changing their social ecology. *Aggression and Violent Behavior*. 2006; 11:120–137.

Table 1**Key Features and Characteristics of “Alternatives for Families: A Cognitive Behavioral Treatment”****Specific Population/Problem Focus**

Child physical abuse; frequent or ineffective use of physical force/discipline; family aggression, coercion, or conflict; child behavior disorders

Conceptual Underpinnings/Principles

Social learning/behavioral theory; Family-systems theory; Cognitive therapy; Developmental victimology

General Clinical Focus/Goals

Address key risks for and consequences of abuse

Blend child, caregiver and child-caregiver sessions

Identify other problems worth treating via referral; Monitor process and outcome

Treatment Targets

Caregiver’s use of harmful or dangerous behaviors (e.g., reduce re-abuse risk); child’s clinical sequelae (e.g., improve behavioral or social functioning/well-being)

Content

Topics include “Abuse-specific” problems & general psychosocial problems/competencies

Training in intrapersonal skills, then interpersonal skills

Process/Structure

3 Phases: Engagement and Psychoeducation, Individual Skill-building, Family Applications

Session modalities: Caregiver only, Child only, Joint sessions

Flexibility

Participants (caregiver, children, others)

Content to be used

Use of additional content, as needed

Order of material (sequence)

Amount of time spent on content - “session”

Level of sophistication

Use of “home practice”

Table 2
Descriptive Statistics and Internal Consistencies for the Evidence-Based Treatment Content Scores

Full Content	# Items	Alpha	Item <i>M</i>	Scale <i>M</i>	<i>SD</i>	Min	Max	Treatment components rated as definitely used (M%) ^a
AF-CBT	25	.85	3.9	96.9	13.8	64	123	57
General	16	.84	4.4	70.3	9.3	42	80	66
Abuse-Specific	9	.75	3.2	28.4	7.6	13	45	39
TF-CBT	16	.74	4.1	60.1	8.3	34	72	60
PCIT	19	.86	4.2	50.5	8.4	26	63	57
CPP	18	.79	3.9	61.8	10.4	34	81	54
CBITS	22	.81	3.9	30.2	12.1	-5 ^b	57	50
Unique Content in Relation to AF-CBT								
TF-CBT	4	.36	4.0	15.9	3.1	8	20	57
PCIT	8	.72	4.1	24.6	4.1	14	33	53
CPP	11	.82	4.3	37.3	7.7	17	47	58
CBITS	12	.69	3.7	-7.3 ^b	8.9	-23 ^b	18	36

Note. See text for full description of each treatment variable.

^aFor each client, the therapist rated how much s/he used each of 43 content items during treatment. The content for a given treatment was based on the number of items rated as "definitely essential" to the treatment approach by the developers of that treatment modality. The value in this last column on the right represents the average proportion of components (items) per treatment approach that were rated a 5 ("definitely used") by their therapists.

^bNegative treatment process content scores occur because these scores are based on items that were "definitely essential" content items for a specific treatment type. Negative treatment process content scores indicate that therapists reported frequently using techniques that were not part of the treatment. Since these ratings are subtracted from total scores, negative scores can result.

Table 3

Basic Descriptive Statistics for the Use of Each AF-CBT Practice Item

Item	% Cases Used	Mean (SD)
Abuse Specific Items		
Child/parent taught ways to increase safety of child	75	4.8 (0.44)
Child/parent taught to identify/challenge thoughts/attributions maintaining abuse/aggression	21	2.2 (1.71)
Physical abuse laws were reviewed with individual or family	19	2.1 (1.67)
Relapse prevention/aftercare plans discussed at end of treatment	62	4.2 (1.36)
Emotional abuse in family witnessed by child reviewed	27	2.7 (1.77)
Details and context of any physical abuse were identified	27	2.3 (1.81)
Incidents of force discussed and no-force agreement established	13	2.0 (1.52)
Child/parent identified unhelpful or inaccurate thoughts about trauma and learned to change them	48	3.9 (1.37)
Child/parent educated about common reactions to trauma	60	4.3 (1.10)
General Items		
Child/parent taught to talk and listen to each other	50	4.2 (1.12)
Child taught about connection of thoughts, feelings, and behavior	60	4.3 (1.02)
Parent taught how to use reinforcement and praise with child	58	4.4 (0.85)
Child practiced being assertive	67	4.9 (1.00)
Child/parent practiced negotiating and problem solving together	54	4.1 (1.34)
Child taught skills to solve real-life problems	62	4.3 (1.22)
Parent given homework for specific parenting skills	60	4.2 (1.23)
Child/parent explained the cognitive-behavioral model	71	4.4 (1.09)
Parent observed and helped to practice skills to improve parent and child relationship	60	4.0 (1.47)
Parent and teacher involved when providing treatment	92	4.9 (0.60)
Family skills training provided in effective communication & problem-solving	52	4.3 (1.06)
Child/parent taught skills to use when upset (e.g., relaxation)	69	4.4 (1.07)
Parent trained to manage child's behavioral problems	71	4.4 (1.06)
Parent/child taught healthy ways to control anger or anxiety	79	4.7 (0.76)
Specific skills taught to parent (e.g., behavior management) and child (e.g., social skills)	79	4.7 (0.81)
Child/parent taught stress management skills (e.g., breathing)	79	4.6 (1.00)
SUBTRACTED ITEM: Child spent time in unstructured play/games	2	1.8 (1.22)

Table 4
Clinical Rating Scale Outcomes Related to the Use of AF-CBT General and Abuse-Specific Content

Outcome Variable	Pretreatment		Posttreatment		GLM Results			
	M		SD		General		Abuse	
					F	p<	F	p<
Child Behavior Checklist								
Externalizing behavior	63.8	10.9	57.6	12.0	0.35	.56	5.00	.03
Internalizing problems	64.5	10.4	58.1	11.6	0.02	.89	0.57	.45
Social competence	44.1	9.5	45.7	10.4	0.01	.71	0.08	.78
Trauma Symptom Checklist for Children								
Anxiety	54.3	13.2	48.2	11.8	0.22	.64	8.37	.008
Depression	52.0	11.1	47.0	12.0	2.85	.11	0.70	.41
Anger	50.5	8.9	44.7	8.6	3.97	.06	9.57	.005
Posttraumatic Stress	50.9	11.4	45.7	9.2	0.00	.95	1.05	.32
Child Sexual Behavior Inventory	68.0	22.5	61.1	18.5	6.00	.44	1.93	.17
Expectations Test								
Scared	4.9	2.4	4.3	2.2	0.07	.79	0.57	.46
Physical Harm	1.7	2.3	1.9	1.7	0.59	.95	0.23	.63
Positive efficacy in interpersonal situations	53.7	27.4	61.1	21.0	3.00	.09	0.01	.95
Social Behaviors Inventory								
Total Social Competence	2.7	8.3	8.7	9.1	0.71	.40	7.06	.01
Aversive- Miscommunication	4.8	3.9	2.7	4.2	0.86	.36	3.85	.05

Note. *dfs* = 46 – 52. Analyses of the effects of AF-CBT control for pre-treatment outcome variables and the unique content scores for the four other evidence-based treatments.

Adjustment Outcome Ratings from Therapists and Parents Related to the Use of AF-CBT General and Abuse-Specific Content

Table 5

Variable	GLM Results					
	M	SD	F	p<	General	Abuse
<i>Average of Therapist and Parent Reports</i>						
Child is less scared/sad and more happy	4.46	0.68	1.30	.26	6.87	.01
Child is more safe from harm	4.44	0.62	0.37	.55	4.38	.04
<i>Therapist Reports</i>						
Child is better able to have friends, without harming them	4.1	0.7	0.01	.97	10.30	.003
Child is more likely not to violate the privacy and/or private parts of others	3.8	1.0	0.01	.94	0.53	.47
Child was physically assaultive with another child	1.6	1.0	0.68	.41	1.27	.27
Child was sexually aggressive with another child	1.5	0.8	0.34	.56	3.48	.07
Parent became more competent	4.3	0.8	1.71	.20	0.01	.92
Final capacity of the parent to attend to the needs and best interests of the child	3.1	0.7	1.71	.20	0.01	.92
Positive prognosis for this child	3.0	0.5	4.06	.05	5.59	.01
<i>Parent Reports</i>						
Child shows good mental health and functioning	4.0	1.0	0.06	.81	0.34	.57
Child is better able to have friends, without harming them	4.4	0.9	2.80	.11	5.83	.02
Child is more likely not to violate the privacy and/or private parts of others	4.5	0.8	1.35	.26	15.56	.001
Services helped me as the child's parent/caregiver	4.5	1.0	9.31	.05	1.15	.29
I was satisfied with services	4.7	0.5	0.02	.89	0.10	.75

Note. *dfs* = 45 – 52. Analyses of the effects of AF-CBT control for the unique content scores for the four other evidence-based treatments.