

An Integrative EMDR and Family Therapy Model for Treating Attachment Trauma in Children: A Case Series

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This case series study investigated the effectiveness of an integrative eye movement desensitization and reprocessing (EMDR) and family therapy model, specifically the Integrative Attachment Trauma Protocol for Children (IATP-C), for improving traumatic stress, attachment relationships, and behaviors in children with a history of attachment trauma; specifically, adopted children with a history of maltreatment and foster or orphanage care. Of the 23 child participants, one family dropped out at 6 months, and 22 completed treatment in 6–24 months. Mean treatment length was 12.7 months. Statistical analysis demonstrated significant improvement in scores on children's traumatic stress symptoms, behaviors, and attachment relationships by the end of treatment. Statistical analysis of secondary measures showed significant improvement in mothers' scores related to symptomology and attitudes toward their child. Gains were maintained for the 15 families who complied with completion and returning of follow-up measures. Limitations of the study include the lack of a control group and small sample size. Future directions include controlled efficacy studies with larger sample sizes as well as exploration of application of the model to a similar population of children in other cultures and to children who are not residing in permanent placements.

Keywords: attachment trauma; complex trauma; adoption; integrative treatment model; family therapy; eye movement desensitization and reprocessing (EMDR) therapy; children

Approximately 53,000 children are adopted annually by U.S. families from the foster care system (Youth and Families Children's Bureau, 2017). Additionally, U.S. families adopt between 5,000 and 6,000 children each year from overseas (Bureau of Consular Affairs, U.S. Department of State, 2015). Circumstances that result in children's placement into foster or orphanage care typically include serious trauma such as neglect regarding basic physical and safety needs, physical abuse, sexual abuse, and/or abandonment by biological parents.

Attachment Trauma

We consider such serious neglect, abuse, and/or abandonment by attachment figures to be "attachment trauma." Subsequent placement outside of the biological home often leads to further traumatic

experiences, such as frequent changes in caregivers and/or exposure to other chaotic environments during placement in foster or orphanage care (Wesselmann, Schweitzer, & Armstrong, 2014b).

Attachment Categories

Sensitive, responsive caregiving in infancy and early childhood leads to attachment security, a positive self-concept, and capacity to trust, which helps modulate stress and distress lifelong. Insensitive or inconsistent caregiving leads to nonsecure attachment designations, specifically avoidance or ambivalence. Avoidant children manage their anxiety by repressing their feelings and needs, while ambivalent children seek to get their needs met with more demanding, angry behaviors (Crittenden, 1999). A third, nonsecure designation is disorganized attachment,

associated with the highest risk for later behavioral and emotional problems. Disorganized children perceive their parent as either “frightened or frightening” due to their parents’ facial expressions, voice tones, or behaviors. Not all disorganized children are maltreated, but 80% of maltreated toddlers are disorganized (Carlson, Cicchetti, Barnett, & Braunwald, 1989).

In addition to attachment disorganization, maltreatment by caregivers is associated with delays in emotional and social development, poor self-concept, and unhealthy defensive mechanisms, including emotional reactivity and dissociation. Even after placement in adoptive homes, maltreated children may continue to exhibit emotional and behavioral dysregulation and may meet criteria for multiple diagnoses, including reactive attachment disorder, posttraumatic stress disorder, oppositional defiant disorder, attentional deficit disorder, and anxiety and mood disorders (Cook et al., 2005; van der Kolk, 2005; Wesselmann et al., 2014b). Adoptive parents often struggle to manage their children’s behaviors and sometimes turn to punitive methods that deepen children’s mistrust and trigger more defensive and reactive behaviors. By the time families start utilizing services, the symptoms, behaviors, and family problems can present a very complicated clinical picture.

AIP Model

The Adaptive Information Processing (AIP) model (Shapiro, 2018) is the underlying theoretical model of eye movement desensitization and reprocessing (EMDR) therapy. The model theorizes that everyday events are naturally processed and integrated with past experiences and information, resulting in adaptive storage in the brain. Conversely, images, emotions, sensations, and perceptions associated with traumatic memories are stored separately in an unprocessed form. Thus, traumatic memories are easily triggered by present-day conscious and subconscious reminders. Stored memories of attachment trauma from early childhood can be easily triggered by later relationships, resulting in defensive interpersonal reactions.

EMDR Therapy

EMDR therapy consists of an eight-phased protocol that activates the natural information processing system and integrates stored, unprocessed traumatic material with stored adaptive material, reducing or eliminating distress and bringing the memory to adaptive resolution. The protocol begins with

history-taking (Phase 1) and preparation (Phase 2), followed by specific steps for reprocessing a traumatic past event or a present-day trigger (Phases 3 through 7) and re-evaluation at follow-up (Phase 8). Bilateral stimulation (BLS) in the form of bilateral eye movements, or tactile or audio stimulation, is implemented during desensitization and reprocessing procedures. The stimulation appears to reduce or eliminate disturbing affect, activate new associations and a present-day orientation, and integrate the unprocessed memory with appropriate semantic networks.

EMDR therapy and trauma-focused cognitive behavioral therapy (TF-CBT) are the only well-supported, evidence-based treatments for children with traumatic stress identified by the World Health Organization (2013) and the California Evidence-Based Clearinghouse for Child Welfare (CEBC). There is a growing list of randomized controlled studies showing evidence for the efficacy of EMDR therapy with traumatized children (Ahmad, Larsson, & Sundelin-Wahlsten, 2007; Chemtob, Nakashima, & Carlson, 2002; de Roos, Greenwald, et al., 2011; de Roos, van der Oord, et al., 2017; Diehle, Opmeer, Boer, Mannarino, & Lindauer, 2015; Jaberghaderi, Greenwald, Rubin, Zand, & Dolatabadi, 2004; Kemp, Drummond, & McDermott, 2010; Soberman, Greenwald, & Rule, 2002; Wanders, Serra, & de Jongh, 2008).

Treatment for Children With a History of Attachment Trauma

The CEBC has rated several interventions as either well-supported, supported, or promising for the improvement of behaviors and parent–child relationships for children with a history or risk of maltreatment through methods designed to increase parental sensitivity and parenting skills. In the case of very young children, interventions include Attachment and Biobehavioral Catch-up for foster families, rated as well-supported (Bick & Dozier, 2013); Child–Parent Psychotherapy, rated as supported (Lieberman, Van Horn, & Ippen, 2005); and Theraplay, rated as promising (Booth & Jenberg, 2010). For families raising children of a wide age range with a history of maltreatment, interventions include Trust-Based Relational Intervention (Purvis, Cross, & Pennings, 2009) and Dyadic Developmental Psychotherapy (Becker-Weidman, 2006), both of which are rated as promising.

Unlike the aforementioned methods, both TF-CBT and EMDR therapy directly address children’s traumatic memories for the purpose of resolving traumatic stress. TF-CBT (e.g., O’Callaghan, McMullen, Shannon, Rafferty, & Black, 2013) incorporates

cognitive and behavioral therapy, parent/child sessions, parent skills, and creation of a detailed trauma narrative as well as in vivo exposure to triggers and reminders. EMDR therapy can easily be integrated with family therapy and other modalities, and unlike TF-CBT, it does not require verbalization of details of events, and it requires no homework (Shapiro, Wesselman, & Mevissen, 2017).

Although randomized controlled trials (RCTs) for both TF-CBT and EMDR demonstrate reduction of traumatic stress and behavioral symptoms in traumatized children, our review of the literature found no RCTs in either modality that targeted a population of adopted children with a history of maltreatment and foster or orphanage care. Children who have been abused or neglected by their parents and abandoned by or removed from their parents present unique challenges to clinicians and researchers because the subsequent behaviors and symptoms are also obstacles to utilization of trauma treatment, for example, the behavioral and emotional dysregulation, mistrust, dissociation, avoidance, and interpersonal reactivity (Wesselman & Shapiro, 2013).

A review of the EMDR therapy literature, however, finds many developmentally appropriate, creative modifications of procedures throughout the eight phases that can assist EMDR clinicians with achieving cooperation, regulation, safety, and trust with complex, highly dysregulated children. The language used during the EMDR procedures can be simplified to be child-friendly, and EMDR therapy can be integrated with play, art, sensorimotor support, story-telling, metaphors, family therapy, and parent support (e.g., Adler-Tapia & Settle, 2017; Gomez, 2013; Greenwald, 2005; Klaff, 2012; Lichtenstein & Brager, 2017; Lovett, 1999; Lovett, 2015; Morris-Smith & Silvestre, 2013; Shapiro, 2018; Shapiro et al., 2017; Struik, Ensink, & Lindauer, 2017; Tinker & Wilson, 1999; Verardo, 2015).

Integrative Attachment Trauma Protocol for Children

The Integrative Attachment Trauma Protocol for Children (IATP-C) was designed to help adopted children with a history of maltreatment and foster or orphanage care (Wesselman et al., 2014b). The protocol was developed with an intention of managing the following obstacles to the children's utilization of therapy: (a) disruptive and avoidant child behaviors; (b) parent/child conflict; (c) lack of adaptive information and poor reasoning skills; (d) poor capacity for self-awareness and self-expression; and (e) poor emotion tolerance and dissociative tendencies.

The protocol integrates family therapy and EMDR therapy and follows a general sequence of procedures. Each of the EMDR therapy sessions follows and builds upon the tasks that are completed in each of the family therapy sessions. Although the model can be implemented by a solo therapist, we find a two-therapist team is most effective for children with a complicated attachment trauma history. Two therapists can more effectively support parents in interpreting and responding to their children's behaviors from a trauma-informed perspective. Because roles are clearly defined in the two-therapist team, weekly implementation of the EMDR and family therapist procedures are more easily achieved. Peer consultation and team collaboration help ensure fidelity to the procedures and provide an opportunity for therapists to problem-solve stalls in clinical progress (Wesselman et al., 2014b, pp. 20–34).

Preparation Phase

The family therapist dedicates time to helping parents understand their child's behaviors through the trauma lens and develop new, more attuned responses (Wesselman et al., 2014b). The family therapist coaches the child and parents in skills for mindfulness and self-regulation; assists with identifying the child's triggers, thoughts, and feelings; and teaches the concept of "the smaller child within the child" (Wesselman, Schweitzer, & Armstrong, 2014a, pp. 56–101.) The EMDR therapist implements Attachment Resource Development (ARD), which consists of several activities, including a nurturing, safe place visualization for "the smaller child within the child" and prompts to elicit loving messages for the child from the parents while utilizing slow BLS to relax the child, bring down defenses, and deepen the experience of closeness, thus strengthening attachment security (Wesselman et al., 2014b, pp. 111–160).

Desensitization and Reprocessing Phases

The EMDR therapist may commence Phases 3 through 8 with the child by targeting current triggers and then developing and reinforcing future templates (Wesselman et al., 2014a, pp. 194–207). The family therapist helps prepare the child for trauma work by creating a very brief therapeutic story based on the child's timeline using an outline based on the work of Lovett (1999) and inviting the child and parents to help identify memories, emotions, negative cognitions, and desired positive cognitions within the story (Wesselman et al., 2014b, pp. 101–104). The EMDR therapist makes a gentle transition to trauma work

by reading the therapeutic story while applying BLS throughout. Next, the therapist commences EMDR trauma processing using standard procedures by inviting the child to focus on specific past events from the story. A critical part of the IATP-C is the utilization of parents to assist with emotional support and co-regulation for the child throughout Phases 3 through 8 (Wesselmann et al., 2014b, pp. 161–207). The pace at which the therapists move through the IATP-C family therapy and EMDR therapy components is dependent upon clinical observation and parents' reports regarding children's responses to the procedures.

Method

Purpose of the Study

The purpose of the case series study was to evaluate the effectiveness of IATP-C for decreasing symptoms of traumatic stress, frequency, and severity of maladaptive behaviors and improving quality of attachment relationships in maltreated adopted children with a history of foster or orphanage care. Secondly, the study examined whether the IATP-C was associated with improvement in adoptive mothers' symptoms related to subjective discomfort, interpersonal relations, and social role performance and an increase in mothers' positive feelings toward the child.

Participants

Participants included 23 children and their adoptive parents, all of whom were seeking help from a private counseling center located in a large, Midwestern city. Children in the study were required to be in an adoptive or preadoptive placement and to have resided in the home for at least 3 months. Children taking psychotropic medications were included in the study if they stayed with the same medication manager throughout the course of treatment. Children suffering from psychosis, autism, fetal alcohol syndrome, or intellectual disability were excluded from the study, as well as children simultaneously attending another form of supportive psychotherapy or neurofeedback therapy. All 23 children had endured profound neglect, 10 had experienced significant physical abuse, and three were known to have suffered significant sexual abuse. Children ranged in age from 7–12 years with an average age of 10 years. Gender of the children numbered 13 males and 10 females. History-taking showed 15 of the children had lived in more than one foster placement, seven had lived in overseas orphanage care, one child

had been adopted twice due to the death of the first adoptive mother, and three children had been hospitalized and in residential treatment prior to the study. Regarding the heritage of the children, 11 were White (nine born in the United States, one in Russia, and one in eastern Europe), one child was Latino, three were Haitian, four were African American, one was Indian, and three were Native American. Of the 23 children, 19 were legally adopted prior to beginning treatment, and four were adopted soon after beginning treatment. The average age at adoption was 5 years old. Of the 23 participants, 14 took psychiatric medication under a psychiatrist's care throughout the treatment, and 13 participated in other counseling prior to the study. All the children had one or more of the following diagnoses: posttraumatic stress disorder, reactive attachment disorder, mood disorder, oppositional defiant disorder, and attention deficit hyperactivity disorder.

Procedures

A mental status examination was conducted at the onset to ensure the risk factors were not at a level that required extra services or a higher level of care. At the initial meeting, parents of children who were appropriate for the study were informed about its purpose and asked to sign a written informed consent form, which included agreement that at least one parent would attend each of the child's therapy sessions. Participation by both parents was strongly encouraged. Parents were asked to commit to regular, twice-weekly attendance at 1-hour sessions for an unknown period. They were informed that the duration of treatment was dependent upon the child's progress. The written informed consent also stated that psychoeducation regarding specialized parenting methods was part of the treatment and that they may be asked to make changes in their parenting methods (Wesselmann et al., 2014b). Parents of 11 children attended a formal parenting class provided by the therapists, and parents of 12 children were provided class information and materials during the first part of the family therapy sessions due to scheduling problems.

The parents of the 23 participants completed measures at pretreatment and then at every 6 months or when parents believed that no further treatment was needed. Sessions decreased in frequency when at least two scores on outcome measures neared subclinical level. Treatment was terminated when three scores on outcome measures were subclinical or near subclinical level, and the parents reported satisfaction with behavioral improvements. Finally, a follow-up set of

assessments was sent to parents 3 months posttreatment. Assessment packets were scored by a counseling intern.

Treatment Team

Five therapists participated in the study. All five therapists were licensed mental health counselors with experience in family therapy, attachment work, and therapy with children. Three of the therapists were trained and certified in EMDR, whereas two therapists were trained but not certified in EMDR. Therapist participation in either the family therapy role or the EMDR therapy role was determined by availability. The therapists who were not certified in EMDR therapy did not participate in the EMDR therapy role.

Primary Outcome Measures (Child Measures)

The following measures were given at intake, at 6-month intervals, and when parents and clinicians agreed that the child appeared to have achieved adequate symptom relief.

Child Behavior Checklist (Achenbach & Rescorla, 2001). The Child Behavior Checklist (CBCL) is a widely used, 113-item assessment completed by parents to assess children's overall emotional and behavioral symptoms. The CBCL provides scores for internalizing versus externalizing problems and total problems as well as DSM-related scales. There is strong evidence for high reliability and validity related to the CBCL. The T-score is considered borderline clinical in the 60–63 range and clinical at 64 (Nakamura, Ebesutani, Bernstein, & Chorpita, 2009).

Trauma Symptom Checklist for Young Children (TSCYC; Briere et al., 2001). The Trauma Symptom Checklist for Young Children (TSCYC) is a 90-item assessment completed by parents that is appropriate for ages 3–12 years. It includes scales for anxiety, depression, anger, sexual concerns, dissociation, and posttraumatic stress intrusion, avoidance, arousal, and a total posttraumatic stress score. The scales have been shown to have validity and high reliability (Briere et al., 2001) and are associated with sexual and physical abuse and domestic violence. Clinical cutoff for the total traumatic stress T-score is 70.

Attachment Disorder Assessment Scale-Revised (Ziegler, 2006). The Attachment Disorder Assessment Scale-Revised (ADAS-R) is a 40-item questionnaire completed by parents. The tool measures the severity

of attachment problems, with a significant probability of reactive attachment disorder when a child's score falls between 40 and 80, and attachment problems indicated in the 25–40 range. It is recommended that the measure be used in addition to other assessment methods. High validity and reliability have been demonstrated by an independent research study (Fairchild-Kienlen, 2001).

Randolph Attachment Disorder Questionnaire (Randolph, 2000). The Randolph Attachment Disorder Questionnaire (RADQ) is a 30-item questionnaire completed by parents to determine the severity of symptoms related to what the author proposes as an "attachment disorder," which she states is not synonymous with reactive attachment disorder. The author of the questionnaire points out that the measure is to be used only in conjunction with other assessment tools (Randolph, 2000). Although the measure has been widely used, Cappelletty, Brown, and Shumate (2005) point out that the lack of published, independent studies of this assessment tool is a limitation. According to the author, a clinical cutoff of 65 is a possible indicator of "attachment disorder" (Randolph, 2000).

Secondary Outcome Measures (Parent Measures)

The following measures were given at intake, at 6-month intervals, and when parents and clinicians agreed that the child appeared to have achieved adequate symptom relief.

Postpartum Bonding Questionnaire (Brockington et al., 2001). The Postpartum Bonding Questionnaire (PBQ) consists of 25 items assessing a mother's feelings of closeness and warmth toward her infant. For the purpose of this study, the word *baby* was replaced with *child* in each item. The measure's subscales were not used for the present study. The original measure was studied and found to have acceptable reliability and validity (Brockington, Fraser, & Wilson, 2006), but the available data do not pertain to the customized wording of this questionnaire for mothers of older children, which is a limitation to its use in this study. There is no clinical cutoff related to the PBQ total score.

Outcome Questionnaire-45 (Lambert et al., 1996). The Outcome Questionnaire-45 (OQ-45) is a 45-item self-report questionnaire for adults that measures the severity of symptoms related to subjective discomfort, interpersonal relations, and social role performance. High reliability and good construct

TABLE 1. Post-Hoc Comparisons of Mean Scores for Primary Outcomes at Pretest and End of Treatment

DV	Measurement Interval (I)	Measurement Interval (J)	Mean Difference (I - J)	SE	p	d
ADAS	1	2	38.41	3.86	.00	3.20
RADQ	1	2	35.96	3.89	.00	2.48
CBCL	1	2	12.64	1.52	.00	1.95
TSCYC	1	2	19.14	3.96	.00	1.44

Note. ADAS = Attachment Disorder Assessment Scale; CBCL = Child Behavior Checklist; Primary outcomes = child participants; RADQ = Randolph Attachment Disorder Questionnaire; SE = standard error; TSCYC = Trauma Symptom Checklist for Young Children.

TABLE 2. Post-Hoc Comparisons of Mean Scores for Secondary Outcomes at Pretest and End of Treatment

DV	Measurement Interval (I)	Measurement Interval (J)	Mean Difference (I - J)	SE	p	d
PBQ	1	2	12.95	3.8	.003	.84
OQ-45	1	2	9.35	4.38	.048	.43

Note. Secondary outcomes = parent participants. OQ-45 = Outcome Questionnaire-45; PBQ = Postpartum Bonding Questionnaire; SE = standard error.

and concurrent validity have been demonstrated (Lambert et al., 1996). Clinical cutoff is 63.

Results

Length of Treatment

Length of treatment averaged 12.7 months. Specifically, four children completed treatment at 6 months, three children completed at 9 months, nine completed at 11–12 months, four completed at 16–20 months, and two completed treatment at 24 months. Measures were completed at pretreatment, 6 months, and end of treatment. One family dropped out after the 6-month assessment. Follow-up packets were distributed at 3 months posttreatment, and 15 of the packets were returned.

Statistical Analyses

The effects of the intervention were investigated using multivariate analysis of variance (MANOVA) with time (pretreatment baseline vs. end of treatment) as the within-subject factor (Social Science Statistics, 2018). One set of dependent variables comprised a group of primary outcomes: child attachment problems (ADAS), attachment disorder symptoms (RADQ), behavioral symptoms (CBCL), and trauma symptoms (TSCYC). Another set of dependent variables comprised a group of secondary outcomes: parents' self-reported feelings toward child (PBQ) and psychosocial function (OQ-45).

Where MANOVA indicated significant main effects of treatment overall, Bonferroni post-hoc tests were used to examine the effect of treatment on each variable.

Primary Outcome Measures. MANOVA of the primary outcomes indicated a significant main effect of time ($F[4, 18] = 30.87, p < .001, \eta^2 = .87$). Bonferroni post-hoc tests indicated that mean scores for attachment problems decreased significantly from baseline to end of treatment ($d = 3.20, p < .001$), and attachment disorder symptoms decreased significantly from baseline to end of treatment ($d = 2.48, p < .001$). Behavioral symptoms also decreased significantly from baseline to end of treatment ($d = 1.95, p < .001$). In addition, trauma symptoms were significantly lower at end of treatment ($d = 1.44, p < .001$; see Table 1).

Secondary Outcome Measures. MANOVA revealed a significant main effect of time on secondary outcomes ($F[2, 18] = 6.45, p < .01, \eta^2 = .42$). Post-hoc comparisons revealed that mean scores of parents' negative feelings toward the child decreased significantly from baseline to end of treatment ($d = .84, p < .01$), and mean scores of parents' general distress were significantly lower at end of treatment ($d = .43, p < .05$; see Table 2).

Although there were too few participants to conduct statistical analysis, gains were maintained according to the follow-up measures for the 15

families who complied with completing and returning the measures.

Discussion

Results offer germinal support for the effectiveness of the IATP-C for improving quality of attachment relationships, behaviors, and traumatic stress symptoms in adopted children with a history of maltreatment. Statistical analyses demonstrated significant improvement on mean scores for all primary and secondary measures from pretreatment to end of treatment. Mean treatment length was 12.7 months and ranged from 6–24 months. Mean scores for the ADAS-R and the TSCYC (PTS) were in the clinical range at pretreatment and in the nonclinical range at 6 months and end of treatment. The mean score for the CBCL was in the clinical range at pretreatment, borderline at 6 months, and in the nonclinical range at end of treatment. The RADQ mean score was slightly below clinical range at pretreatment and significantly below clinical range at 6 months and end of treatment. All mean scores remained below clinical range at follow-up for the 15 families who completed and returned their follow-up packets (see Table 3 and Figures 1–4).

Children with a history of attachment trauma present with challenges to effective utilization of therapy, including reactivity, avoidance, mistrust, dissociative symptoms, and conflicted parent–child relationships. In our observation, the self-regulation skills and parent education implemented by the family therapist in collaboration with the ARD procedures conducted by the EMDR therapist during the

preparation phase increased children’s felt security and stability. The family therapy activities, including creation of a timeline and therapeutic story, provided additional preparation for EMDR targeting and processing of traumatic memories during Phases 3 through 8.

Results provided initial evidence that the IATP-C has a positive effect on mothers’ symptomology. The mean score for symptomology on the OQ-45 improved significantly from pretreatment to end of treatment, although the mean did not fall into clinical range at pretreatment. Possible explanations of improved scores include a decrease in parental stress due to their child’s improved functioning and personal benefits from learning self-regulation skills along with their child. The mean score on the PBQ also improved significantly from pretreatment to end of treatment, giving preliminary evidence that the mothers had more positive feelings toward their child as treatment progressed. The parents’ empathy for their child may have increased due to the child’s behavioral improvements and the parents’ involvement during ARD procedures and EMDR trauma processing. The parent education component may have increased parents’ sense of compassion by viewing their child’s behaviors through the lens of trauma and attachment.

There is no clinical cutoff for total score on the PBQ, but the mean total scores were much higher for the 21 foster and adoptive mothers in the present study than the mean total scores in a normal population of mothers of infants in a study of 263 postpartum mothers in Belgium (van Bussel, Spitz, &

TABLE 3. Descriptive Statistics of Measures at Initial Intake, Six Months Into Treatment, End of Treatment, and Follow-Up

Measure	Initial Intake			Six Months Into Treatment			End of Treatment			Follow-Up		
	M	SD	N	M	SD	N	M	SD	N	M	SD	N
ADAS-R	45.52 ^a	11.94	23	15.17 ^c	17.39	23	6.64 ^c	12.00	22	6.20 ^c	12.87	15
CBCL	72.04 ^a	5.46	23	63.35 ^b	7.07	23	59.36 ^c	7.25	22	58.67 ^c	5.09	15
TSCYC-PTS	70.13 ^a	16.28	23	57.68 ^c	10.30	22	50.91 ^c	8.71	22	51.20 ^c	7.08	15
RADQ	61.39 ^c	16.47	23	32.30 ^c	12.97	23	25.41 ^c	12.70	22	27.87 ^c	16.28	15
OQ45	46.18 ^c	22.32	22	37.81 ^c	16.79	22	35.24 ^c	19.61	21	30.20 ^c	21.21	15
PBQ	39.62 ^d	16.50	21	30.70 ^d	17.69	23	26.45 ^d	13.20	22	20.67 ^d	13.44	15

Note. Total scores are used to determine cutoffs for clinical symptom levels. Length of treatment ranged from 6–24 months. Follow-up ranged from 3–6 months posttreatment. *Primary Measures (Children):* ADAS-R = Attachment Disorder Assessment Scale-Revised. CBCL = Child Behavior Checklist for ages 6–18 years, total behaviors score. RADQ = Randolph Attachment Disorder Questionnaire. TSCYC-PTS = Trauma System Checklist for Young Children, Total Posttraumatic Stress Score. *Secondary Measures (Parents):* OQ45 = Outcome Questionnaire 45; PBQ = Postpartum Bonding Questionnaire.

^aClinical.

^bBorderline clinical.

^cNonclinical.

^dNo clinical cutoff.

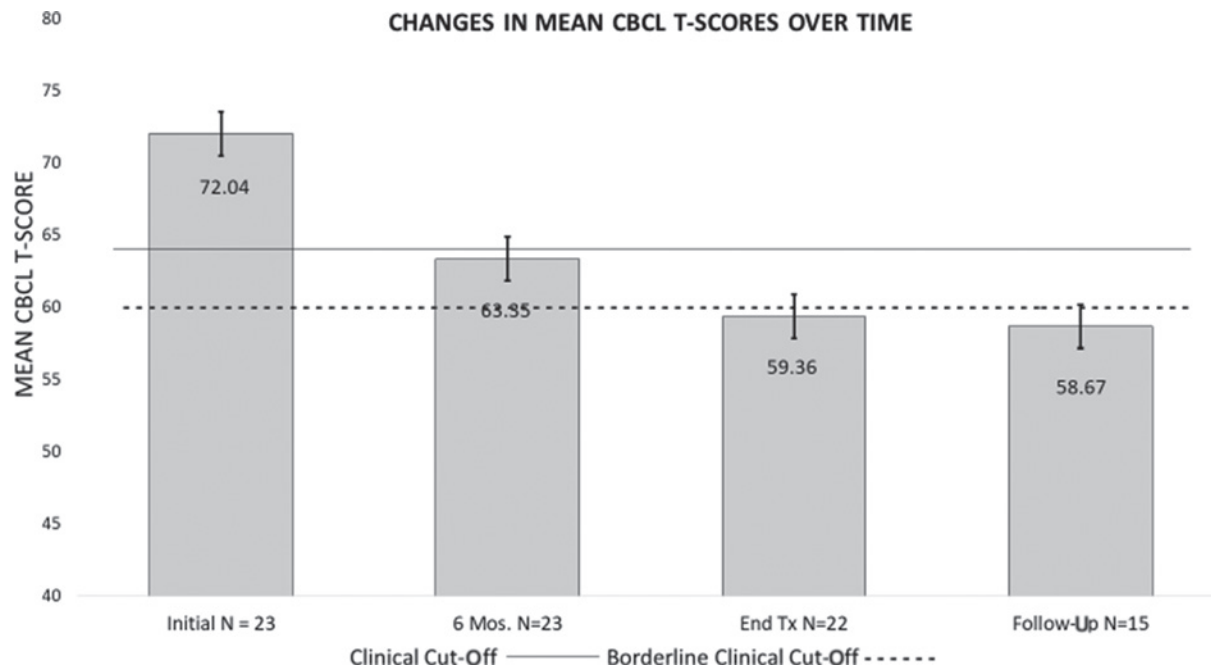


FIGURE 1. CBCL= Child Behavior Checklist.

Demyttenaere, 2010). The Belgium mothers' mean PBQ total score was 10.72 at 8–12 weeks postpartum and 7.67 at 20–25 weeks postpartum compared to 39.62 mean total PBQ score at pretreatment and 26.45 at end of treatment for the mothers in the present study, highlighting the importance of the family therapy component of the treatment model.

Following treatment, children with cognitive, emotional, and social delays should continue to have access to appropriate mental health care to

manage new obstacles and life challenges that may arise. Children and their parents were told that they could return for “tune-up” sessions as needed. Thirteen of the 23 children in the study returned later for therapeutic assistance with managing new school or peer pressures, family changes, or other stressors. A positive attitude toward seeking therapeutic assistance appeared to be an additional gain for families involved in the integrative treatment method.

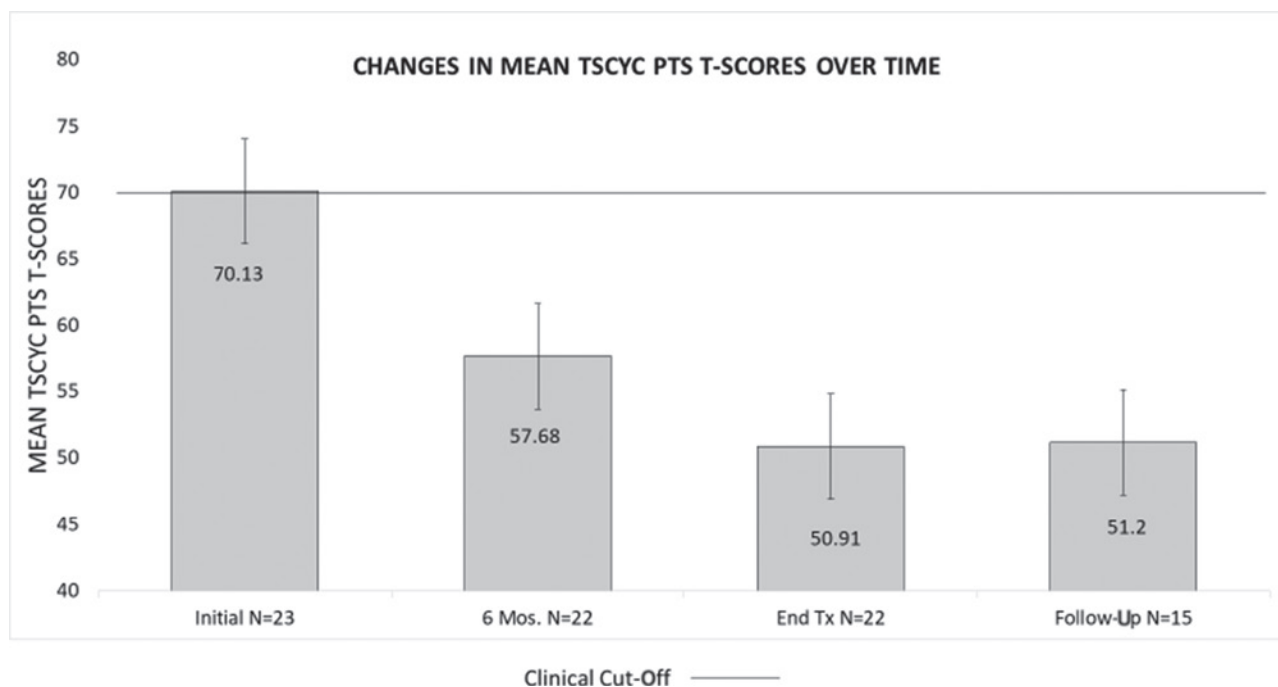


FIGURE 2. TSCYC= Trauma Symptom Checklist for Young Children. PTS = posttraumatic stress score.

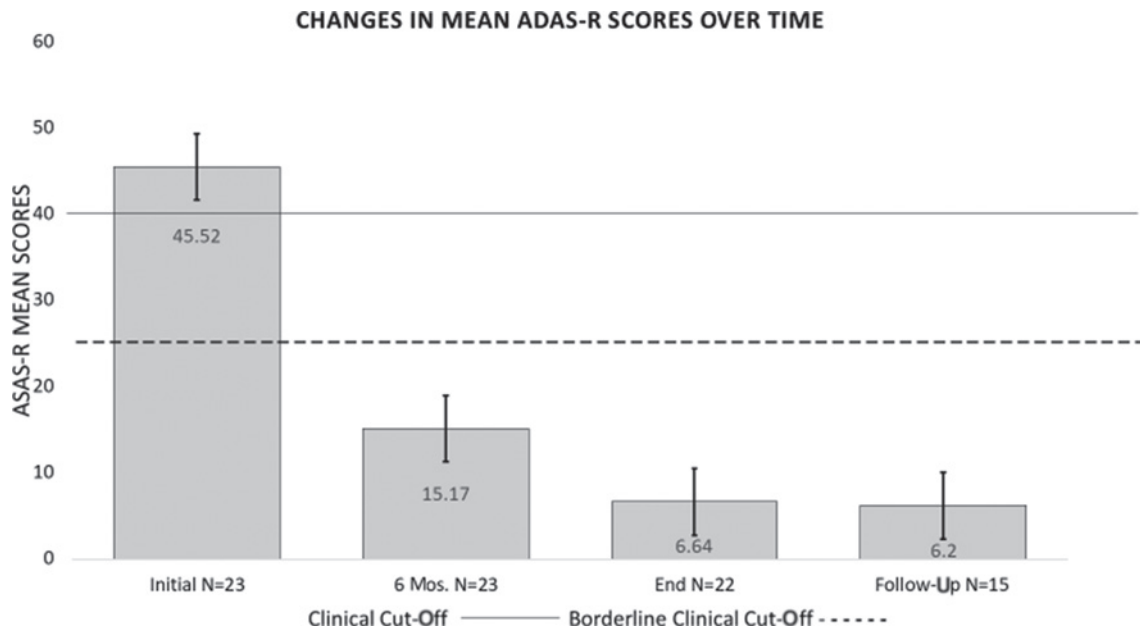


FIGURE 3. ADAS-R=Attachment Disorder Assessment Scale-Revised.

Limitations

Despite the notable strengths of the current study, some limitations exist. First, the case series study is limited by the small sample size. In addition, the rephrasing of the language on the PBQ to customize the measure to mothers of older children was a limitation, as the change in language has not been the subject of reliability and validity testing. The RADQ also lacks adequate reliability and validity testing. Standard EMDR protocol was utilized, but assessment to fidelity was not conducted and is a limitation

to the study. Finally and most notable was lack of a control group to allow comparison of the integrative treatment to alternative treatments.

Conclusion

Children with a history of serious abuse, neglect, foster or orphanage care, and adoption commonly suffer from posttraumatic symptoms, nonsecure attachments, and behavioral problems. Successful treatment for this population must overcome numerous challenges, including parent-child conflict, lack of

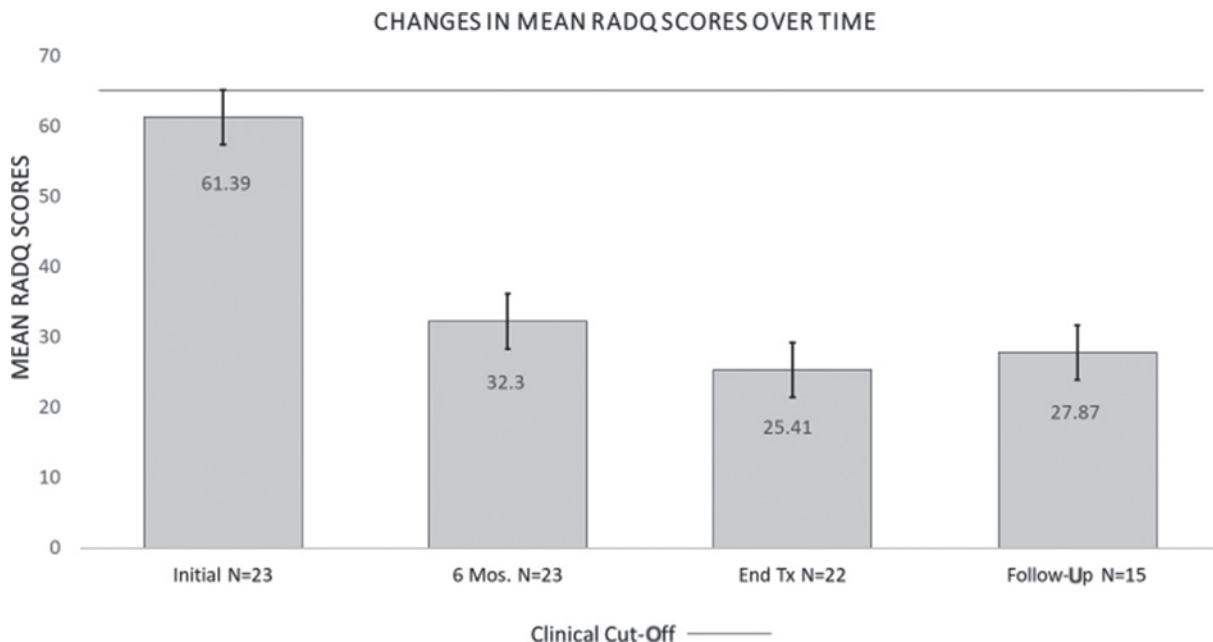


FIGURE 4. RADQ= Randolph Attachment Disorder Questionnaire.

self-awareness, poor emotion tolerance, reactive interpersonal behaviors, avoidance, and dissociative tendencies. The IATP-C shows promise as an effective treatment method for this vulnerable child population. In the present case study series, the IATP-C appeared to significantly decrease behavioral and traumatic stress symptoms and improve attachment relationships in the child participants and to increase the mothers' positive feelings toward their child and decrease their symptomology. Additional research is recommended to investigate the efficacy of the IATP-C for treating children and families impacted by attachment trauma.

Recommendations for Future Research

Larger controlled studies are needed that compare outcomes following treatment with the integrative model and outcomes following treatment with another approach. A controlled study comparing family therapy and EMDR therapy to family therapy paired with an alternative trauma therapy is recommended. Studies of application of the model with adolescents with a history of attachment trauma and with children who are reunified with biological parents are suggested. Additionally, the present study did not include children for whom no permanency placements were available. Investigation of how the model might be customized for children without permanent placements is advised. The model should be examined for application of the model for children in cultures outside of the United States, and continued investigation is also recommended for application with children in diverse cultures within the United States. The RADQ did not appear to add anything to the study beyond what was gained from the ADAS-R and lacks research regarding fidelity and validity, so future researchers may consider dropping that measure.

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