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## Child mental representations of attachment when mothers are traumatized: The relationship of family-drawings to story-stem completion

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### Abstract

This study examines the relationship between child play-narratives and family drawings by children of violence-exposed mothers with posttraumatic stress disorder (PTSD). The Family Attachment Drawing Task (FAD-T) and MacArthur Story Stem Battery (MSSB) were administered. Of the 23 children (ages 4–7 years), 16 (70%) created drawings that were coded as being representative of insecure attachment. Attachment insecurity and disorganization of child-caregiver attachment on the FAD-T were significantly associated with trauma-related dimensions of the MSSB, but not to other factors. This study suggests that the FAD-T provides access to child mental representations, which may affect intergenerational transmission of violent trauma.

### Keywords

mental representations; attachment; PTSD; aggressive behavior; child drawings

## Introduction

Clinicians have long relied on child drawings to inform psychiatric assessment (Burns & Kaufman, 1972; DiLeo, 1973; Koppitz, 1966; Shapiro & Stine, 1965; Zalsman, et al., 2000). Children's drawings have often been used to provide access to the child's mental representations of self, others, and relationships with others as well as to mark change in those representations with intervention (Coates & Moore, 1997; LeRoy & Derdeyn, 1976; Peterson, Hardin, & Nitsch, 1995; Schechter, 2003). Bowlby hypothesized that mental representations of attachment are the vehicles for intergenerational transmission of disturbances of attachment that support "cycles of violence" in families (Bowlby, 1988). Fraiberg furthermore observed that mental representations of traumatizing figures and relationship with those figures in the caregiver's early life often permeate the caregiver's mental representations of her child, and as "ghosts in the nursery," mysteriously haunt the caregiver and child's present interactions (Fraiberg, Adelson, & Shapiro, 1975).

The empirical study of the role of mental representations, as embodied in the drawings and narratives of young children, may provide useful clues as to the psychological mechanisms by which intergenerational cycles of violence are perpetuated in the context of the caregiver-child relationship (Schechter, 2003; Schechter, Brunelli, Cunningham, Brown, & Baca, 2002). Crucial to demystifying intergenerational transmission of violent trauma is the understanding of how child mental representations of self and other develop, and how these mental representations are influenced by the caregiver's experience and psychological functioning in early childhood.

The ability to measure the content and quality of mental representations in different modalities provides the potential for a more comprehensive assessment of mental representations, in both verbal and non-verbal or visual realms. Multi-modal measurement of child mental representations also allows for potential integration by the child and the clinician with respect to various aspects of mental representations of self and other, particularly in the context of disintegrating intergenerational cycles of trauma and disturbed attachments.

Kaplan and Main (1986) developed specific coding criteria to rate the quality of mental representations of attachment relationships through children's drawings of their families including themselves (ages 5–9 years). Kaplan and Main focused on size, location, degree of movement, individualized characteristics, completeness of figures, facial expression, context, and overall impression of vulnerability (Kaplan & Main, 1986).

Since its development the measure has had a number of successful applications: Pianta, Longmaid, and Ferguson (1999) found via study of drawings of 200 five-year-old children that the Kaplan and Main coding system was significantly associated with previous and concurrent social and behavioral competence. Fury, Carlson, and Sroufe (1997) reported in a study of 171 eight-year-olds from a high risk sample that infant attachment classifications based on observation of child behavior during the Strange Situation were significantly associated with coding categories of children's drawing of family including themselves. Recent studies have replicated this finding (Madigan, Goldberg, Moran, & Pederson, 2004; Madigan, Ladd, & Goldberg, 2003) and have found additional correlations with the quality of the home environment (Carlson, Sroufe, & Egeland, 2004).

Carlson et al. (2004) also found the following: 1) a moderate correlation ( $r=.43$ ;  $p<.05$ ) between the quality of mental representations derived using a semi-structured interview of preschoolers and the quality of mental representations coded on the task requiring children's drawing of family including themselves at age 8, namely, the Family Attachment Drawing Task; and, 2) a weak correlation ( $r=.22$ ;  $p<.05$ ) between the quality of mental representations on the Family Attachment Drawing Task at age 8, and those from a narrative measure at age 12. The Drawing

Task showed continuity across time and modality. Yet the correlation between the quality of maternal representations with respect to attachment security on the FAD-T and the narrative measure at age 12 did not take into account properties of the narrative such as salient themes and coherence associated with attachment classifications.

The question therefore remained: How do mental representations as coded on the Family Attachment Drawing Task relate to those mental representations coded on a narrative measure at the same time in the child's life.

In a previous paper (Schechter, et al., 2005), we found that child mental representations, as revealed by play narratives which were elicited from children ages 4–7 years in response to story stems on the MacArthur Story Stem Battery (MSSB), were significantly associated with maternal interpersonal violence exposure and related posttraumatic stress disorder (PTSD). Children of mothers who had filed for a restraining order because of domestic violence as well as children of mothers who had greater PTSD severity, created play narratives on the MSSB that displayed greater dysregulated aggression, spontaneous elaboration of danger and distress, as well as avoidance and withdrawal of emotionally-laden familial conflict. Indeed, these associations outshone the relationship of child interpersonal violence exposure and related PTSD to child responses on the MSSB.

The MSSB dimensions that were significantly related to maternal exposure to domestic violence and PTSD have, in clinical samples, been both associated with disturbed parent-child relationship and disruptive child behavior (Warren, 2003).

The present study advances the hypothesis that insecure, more disorganized attachment representations as coded via the Family Attachment Drawing Task (FAD-T) would be:

1. Associated with greater levels of dysregulated aggression, danger and distress, and avoidance/withdrawal on the MSSB.
2. Secondly, like the MSSB, associated with maternal interpersonal violence exposure and related PTSD symptoms. We additionally wanted to explore any possible relationship between parallel child trauma and related symptom measures and ratings on the FAD-T.

## Method

Permission was obtained from the Institutional Review Board of the New York State psychiatric Institute/Columbia University Department of Psychiatry.

The participants in this study represented a sub-sample of 25 children (ages 4 to 7 years) from 24 dyads that had participated in a larger study of 41 dyads two years prior when the children were ages 8 to 50 months. This larger “baseline study” focused on the relationship of maternal violence-related PTSD symptomatology to maternal perception and caregiving behavior (Schechter, 2003; Schechter et al., 2005; Schechter, et al., 2004). No statistically significant differences were found between those participant dyads from the baseline study who returned (59%) and those who did not with respect to maternal or child age, maternal education, father's presence, or other measures of maternal adverse life events or symptomatology.

Exclusion criteria for the two year follow up visit were maternal or child mental or physical disability that would preclude performance on study-tasks. Further exclusion criteria included child receptive language functioning on the Peabody Picture Vocabulary Test (PPVT-III) (Dunn & Dunn, 1997) equal or greater than 1 standard deviation below the mean (norm=100, SD=15). The PPVT has proven to be a reliable and valid measure of receptive language among

low-income minority children (Qi, Kaiser, Milan, & Hancock, 2006). None of the children or their mothers had to be excluded on these bases.

Standard statistical methods were applied to test the a-priori hypotheses. Differences between groups of mothers were tested using a one-way analysis of variance; degree of association between continuous measures was estimated by Pearson's correlations (type I error was unadjusted and set at 5%, two-tailed tests).

## Measures

### Maternal trauma measures

As described in Schechter et al. (2005), maternal measures were obtained two years prior to acquisition of child mental representation data. Maternal interpersonal violent trauma history was assessed via a standard Demographic and Treatment History Questionnaire, the Life-Events Checklist (LEC) (Johnson & McCutcheon, 1980) the Brief Physical and Sexual Abuse Questionnaire (BPSAQ) (Marshall, Jorm, Grayson, & O'Toole, 1998). Detailed information concerning the use and the scoring of the BPSAQ may be found in a previous paper by the authors of the present study (Schechter, Coots, Zeanah et al., 2005).

Maternal PTSD was assessed via the Structured Clinical Interview for the DSM-IV (SCID--Including PTSD Module with Chronology of Life Events) (First, Spitzer, Gibbon, & Williams, 1995), which has proven to be a consistently reliable and valid measure of Axis I psychiatric disorders (Schneider, Maurer, Sargk et al., 2004). Using the SCID, severity of disorder was marked by the total number of endorsed symptoms that followed disclosed interpersonal violent life experiences.

### Child Adverse Life Events and Dissociative Symptoms

The Life-Events Checklist (LEC) (Johnson & McCutcheon, 1980), as noted above, was given to mothers about their children's adverse life experiences. This measure is a standard 17-item checklist that lists a range of potentially traumatogenic events from natural disasters to accidents, to combat and interpersonal violent events. The LEC classifies events as experienced directly, witnessed, or recounted by another individual.

The Child Dissociative Checklist (CDC) (Putnam, Helmers, & Horowitz, 1993) is a clinical screening instrument that assesses dissociation and other trauma-related symptoms on the basis of ratings given by caregivers or adults in close contact with the child. The CDC is a 20-item observer-report checklist with a 3-point scale (0=not true, 1=sometimes true, 2=frequently true). A score of 6 or above is frequently found in the presence of child PTSD; whereas a score of 12 or higher suggests the possibility of a distinct dissociative condition (Putnam et al., 1993). The Child Dissociative Checklist shows good 1-year test-retest stability ( $r=0.65$ ) and internal consistency (Cronbach's  $\alpha=0.86$ ). Good convergent and discriminant validity have been indicated (Putnam et al., 1993).

### Assessing family-attachment via child drawings

Children's mental representations of self and attachment figures were investigated in family drawings via the Family-Attachment Drawing Task (FAD-T) (Fury et al., 1997). At the start of the procedure, children were escorted into the playroom by the research psychologist. A sheet of 8" x 11" white paper was placed on the table with a packet of eight colored markers. Each child was then asked to "Draw a picture of your family including yourself." As the child drew, the psychologist asked the child to clarify which family member they were drawing, to identify any ambiguous features, and to tell what the family was doing and where they were. The entire drawing process was videotaped. Videotapes were reviewed by the coders to

understand the order of figures drawn and anything else about the process that might affect coding, such as scratching out or tearing up a picture and starting over.

The drawing was coded using theoretically derived 7-point global ratings (Fury et al., 1997). Attachment classification as Secure, Insecure, including Avoidant and Resistant, and Other Insecure was based on a) 7-point family relationship ratings that were designed to capture the child's expectations of family interaction and the child's sense of self in the context of the family, and b) an overall impression that is guided by attachment classification descriptions. On the family relationship scale, high rating (i.e. "7") indicators included inclusion of all family members in the drawing, organized positioning of family members (e.g., not crowded together or randomly placed), complete figures (e.g., no gross distortions, disguises, or omissions of body parts or facial features), positive indices of family connection (e.g., figures holding hands, shared activity), and use of color and background elaboration. Process variables such as order of figures, time, effort, and detail spent on main figures versus the background or starting over were factored into the rating given.

The primary coder was completely naïve to details about the child or family; the secondary coder had been in contact with some of the families by phone and/or in the lab to assist in coordination of lab visits, but did not have access to other data that would have necessarily biased the coding. Kappa for the two raters was acceptable at .74,  $p < .001$ . Final classification was based on consensus.

Degree of disorganization was based on a 10-item checklist that collapsed signs of Anxious-Insecure and Disorganized/Disoriented attachment as conceptualized by Fury et al. (1997) based on the Kaplan and Main (1986) coding criteria. These signs included: Lack of background detail, figures not grounded, incomplete figures, mother not feminized, undifferentiated gender in self and others, neutral or negative facial affect, false starts, scrunched figures, and unusual signs, symbols or scenes. A mixture of avoidant and resistant features (i.e. mother and child very far apart and child and sibling overlapping) also contributed to the disorganization score. Coders were asked to integrate the number of items coded as present on the 10-item checklist with their overall impression. The degree of disorganization consisted of a five-point scale based on the presence of three or more signs from the checklist. The scale ranged from "1" (e.g., "not at all") to "5" (e.g., "extremely"). Intraclass correlation coefficient of reliability for the two raters was excellent at .81,  $p < .001$ . The final score was the average of the two ratings.

### **Clinician-assessed child play narrative**

Eight story stems from the MacArthur Story-Stem Battery (MSSB) (Bretherton, Prentiss, & Ridgeway, 1990) were administered by a female psychologist who was naïve to any information about the index child and family. These 8 story stems were administered to all children after a positive emotionally charged story-stem about a birthday party was given as a model. The MSSB was conducted during individual videotaped sessions with examiner and child alone that lasted generally 25 to 30 minutes. The MSSB story-stems chosen for this study protocol included a range of emotionally-charged family interactions that focused on parental conflict, child injury, separation, frightening situations, child temptation in the face of parental prohibition, parental emotional unavailability, child oppositionality, and child-triggered accidents. For example, in one story-stem, mother sets the breakfast-table. After the family sits down, the child reaches for a glass of orange juice and spills it. The examiner then says to the child, "Show and tell me what happens next!"

The examiner introduced the cast of characters in the form of family dolls to each participant prior to each story-stem. The dolls were ethnically- and gender-matched to participants. Narratives were always presented in the same order. For each narrative, the child was asked

to listen to the beginning of the story and then to show and tell the examiner what happened next. If the central theme or conflict in the story-stem was not addressed by the participant, the examiner presented a standardized probe, such as, “What about the spilled juice?” or, “What else happens after Johnny spilled the juice?”

For the purposes of testing the a-priori hypotheses of this study, the following selected subscale dimensions were used based on use in a prior study of story stem responses within an inner-city population (Robinson, Herot, Haynes, & Mantz-Simmons, 2000): The subscales of *aggression* (i.e. degree of hostile aggression noted in play-narrative content), *personal injury* (i.e. degree of preoccupation with bodily damage and integrity), and *escalation of conflict* (i.e. inflation of interpersonal conflict rather than resolution or lack thereof) were grouped as “**Dysregulated aggression.**” The subscales *distress* (i.e. expression of helplessness, fear and acute discomfort), and “*new or clear worsening of danger*” (i.e. introduction of or intensification of worries about lack of safety, threats, and impending disaster) were grouped together as “**Danger and distress.**” And the subscales *exclusion of self* (i.e., degree of avoidance of representing the self/central child figure in the narrative), *repetition* (i.e. repeating the story-stem or detail of the narrative that is not essential to the resolution of a conflict), *denial* (i.e. ignoring or minimizing the central conflict and associated negative affects), and *dissociation* (i.e. spacing out during the narration/play, derailing the narrative with non-sequiters, or otherwise odd, or bizarre verbalizations, voicings/devoicings, or other behavior at moments of tension in the narrative, as if to remove oneself from the assessment) were grouped together as “**Avoidance/withdrawal.**”

In addition to the three content dimensions, “**Narrative coherence**” as a qualitative dimension of the narrative was also coded (i.e. linking events in the narrative in a logical and understandable sequence, maintaining character, and maintaining a unifying or organizing topic/theme or set thereof)

Videotapes were coded independently by two experienced coders who were reliable on the MSSB and naïve to any information about the participant except for age and gender. Overall interrater reliability was excellent ( $\kappa=0.94$ ). Interrater reliability on the three aggregated subscales that were used to test hypotheses in this study was also quite good: Dysregulated aggression ( $\kappa=.86$ ), Danger/distress ( $\kappa=.79$ ), Avoidance/withdrawal ( $\kappa=.80$ ), and Narrative Coherence ( $\kappa=.98$ ).

## Procedure

Mothers who had participated in the baseline study (i.e. when child was ages 8 to 50 months) were sent a letter asking them to contact research staff within 2 weeks if they would like to participate or if they did not want us to call them. Three weeks after the letters were sent, a female research assistant called the mothers to describe the study and set up an appointment if they were interested in participating.

Following informed consent, the research assistant obtained updated demographic and treatment history data as well as self-report and report of child symptoms from participant mothers. Children were escorted into the playroom by the clinical psychologist, who administered the Family Attachment Drawing Task followed by the PPVT and MSSB. This single videotaped “follow-up visit” lasted 1–2 hours. Mothers were financially compensated. The children received a toy or book.

## Characteristics of the Sample

**Demographic and descriptive measures**—Thirteen boy and 12 girl participants were recruited from 24 mothers who had originally participated in the study. Two children were

fraternal twins, a boy and a girl. The average age at the time of the visit was 71 months (s.d.=11.8). The average age of the mothers was 32 years (s.d.= 7.3). The average number of years of mothers' education was 11 (s.d.=2, range 7–16). Sixty-seven percent (16) of the mothers were without male partners steadily living in the home and were eligible for public assistance; 51% (12) received public assistance.

**Maternal trauma and PTSD**—All mothers reported a history of interpersonal violent trauma (physical and/or sexual abuse, and/or domestic violence exposure) prior to age 16 years on the BPSAQ. In total, the mean number of violent events experienced by each mother was 3 (s.d. 1.8, range 1–7). Of the 24 mothers who returned for the follow-up study, the mean number of lifetime PTSD symptoms related specifically to the violent traumatic experience with which they were diagnosed on the SCID in the baseline study was 12.4 (s.d.=2.5, range= 8–15). All mothers met criteria for lifetime violence-related PTSD but not necessarily for current PTSD. In this sample of 24 mothers, 6 (24%) met criteria for current violence-related PTSD on the SCID.

**Follow-up study of child sample**—Twenty-three of the 25 child-participants who returned two years after maternal trauma and PTSD assessment completed the MSSB. Two children were not able to complete the MSSB. A 5-year-old boy became disorganized and disruptive 10 minutes into the procedure, and a mutual decision with the caregiver was made to terminate the MSSB. In the other case, a 5-year-old girl who had become selectively mute and separation anxious in the context of an acute family stressor would not participate in the task and became acutely distressed in the playroom in the company of her mother. In both cases, complete maternal reported data were obtained. No statistically significant differences were found between these two children and those children who were able to complete the task with respect to maternal or child age, maternal education, father's presence, or other measures of maternal adverse life events or symptomatology.

The results reported below thus pertain to the 23 children (e.g. 11 boys and 12 girls) of 22 mothers, who completed both the MSSB and the Family Attachment Drawing Task.

## Results

### Child trauma and PTSD

The mean number of adverse life events across all types of trauma (e.g. accidents, medical/surgical procedures, and experienced and/or witnessed violence) meeting DSM-IV PTSD Criterion A on the LEC was 2.3 (s.d.= 2.3, range 0–10). Only 4 (16%) experienced no such event. The mean severity of the Child Dissociative Checklist (CDC) was 9.4 (s.d.= 8.8; range 0–34). The correlation between the number of adverse life events on the child LEC and the CDC was robust:  $r=.59$ ,  $p=.005$

### Representational Measures: FAD-T and MSSB

Seven of those 23 children (30%) who completed both representational measures created drawings that were coded as "secure", with 16 children's drawings (70%), coded as "insecure". Of the 16 children whose drawings were classified as insecure, 14 (88%) were classified as "disorganized", 1 (6%) as avoidant, and 1 (6%) as resistant. When a continuous rating scale of disorganization was applied to the coding of all 23 children's drawings, the mean on a scale of 1–5 was 3.4 (s.d. 1.5). Child age at time of the drawing task was, nevertheless, not significantly associated with the degree of disorganization ( $r=-.21$ ,  $p=.34$ ).

While maternal PTSD severity explained 36% of the variance of the aggregated MSSB subscales mentioned (Schechter, Zygmunt, Davies, et al., invited paper/submitted), the FAD-

T was not significantly associated with any maternal factors including maternal PTSD severity. Nor was the FAD-T associated with child psychopathology measures based on maternal report.

Means and standard deviations for the three content dimensions and narrative coherence on the MSSB were measured. The means for dysregulated aggression (range 0–2), danger and distress (range 0–2), and avoidance/withdrawal (range –1 – 1) were: .87 (s.d. .58), .57 (s.d. .40), and .48 (s.d. .50) respectively. The mean for narrative coherence (range 0–2) was: .47 (s.d. .31).

The FAD-T was, however, robustly associated with child play behavior and narratives as coded along the MSSB dimensions that were of a priori interest given our hypotheses. Table 1. describes these results.

## Discussion

In this study, we found that both security and disorganization of child-caregiver attachment as measured via the Family Attachment Drawing Task (FAD-T), within a sample of 23 referred children (ages 4–7 years) and their traumatized mothers, were significantly associated with key trauma-associated dimensions of child play-narrative and associated behavior as measured via the MacArthur Story Stem Battery (MSSB). This study supports the findings of several other studies that the FAD-T is a useful tool to assess child mental representations of the primary attachment relationship(s) in the context of psychosocial assessment and intervention (Carlson et al., 2004; Fury et al., 1997; Madigan et al., 2004; Madigan et al., 2003; Pianta et al., 1999).

The strongest effects measured in our study were those of the associations between the two measures of child mental representations. In support of our hypotheses, both categorical attachment insecurity and greater attachment disorganization on the continuous scoring of the FAD-T converged in inverse relationships with the three aggregated dimensions on the MSSB: 1) dysregulated aggression, 2) danger and distress, and 3) avoidance/withdrawal. Of these three dimensions, avoidance/withdrawal, an analog of “frightened” (i.e. helpless) content and behavior was most robustly associated with attachment security and degree of disorganization on the FAD-T. The analog of “frightening” (i.e. hostile/intrusive) content and behavior on the MSSB was also, by itself, significantly associated with attachment security and degree of attachment disorganization on the FAD-T; however, the MSSB dimension of danger and distress, by itself, was not.

Attachment insecurity and the degree of attachment disorganization on the FAD-T were inversely associated with narrative coherence on the MSSB at trend-levels of significance as predicted.

It is noteworthy that a) both “helpless” and “hostile” states of mind (Lyons-Ruth, Atwood, & Bronfman, 1999) are already present in the representations of the young children of traumatized mothers, together with b) reduced narrative coherence (i.e. lack of integration), and that these characteristics of the child mental representations are associated with attachment insecurity and disorganization during early childhood.

The clinical usefulness of the FAD-T notwithstanding, we were interested to note that trauma-related maternal factors, such as severity of PTSD, were not significantly associated with the results of the FAD-T as they had been in relation to the MSSB (Schechter, Zygumt, Davies et al., invited paper/submitted). We wondered whether this might have to do with one or more of the following factors: a) the nature of the FAD-T, b) limited power, and/or c) lack of a non-violence-exposed control group of mothers and their children. As we were unable to have a control group in this pilot study, we cannot discount that if comparison to a non-traumatized



group of mothers and children were possible, maternal trauma-related factors might have been more significantly associated with child performance on the FAD-T.

The lack of a significant relationship of results on the FAD-T with those of maternal-report measures of number of adverse events or child trauma-associated symptoms (e.g. the Child Dissociative Checklist) was, on the other hand, consistent with our findings with respect to the MSSB. In other words, maternal experience of trauma and related psychological symptoms were more salient to the development of the child's mental representations than the child's experience and related symptoms. This is not to say that the child's adverse experiences did not demonstrate any effect; but rather, it seems as if the impact of the child's experience can be buffered or exacerbated by the caregiver's response and, in turn, her contribution to the co-constructed meaning of the experience.

Bowlby's notion of the *internal working model* 1969 suggested that the mental representations that are based on early childhood attachment experiences with the primary caregiver form a template that guides parenting behavior during adulthood. Bowlby (1988) and later Bretherton (1999) suggested the role of the dysregulated and dysregulating internal working model as a vector by which trauma may be communicated intergenerationally. Our studies have supported the existence of a clear link between maternal interpersonal violence-related PTSD and the content and quality of child mental representations as measured by the MSSB. This paper provides evidence specifically for a relationship between the MSSB as a well-established narrative measure of child mental representations and the FAD-T as a less well-established, but nonetheless useful drawing measure of child mental representations. This work thus extends our previous research linking maternal interpersonal violent trauma and related PTSD to maternal mental representations of her child as well as to child mental representations of self and other on the MSSB (Schechter, 2004; Schechter et al., 2005; Schechter et al., invited paper/submitted).

### Limitations of the study

In addition to lack of a control group as mentioned, this study was limited by its small referred sample, hence potentially by unknown selection bias. Having been unable to recruit more than 59% of the original sample, attrition bias may also have limited replicability in this prospective study.

### Clinical Example

To demonstrate the convergence and divergence of the MSSB and FAD-T in the assessment of child mental representations within our sample with respect to intergenerational communication of violent trauma in the context of attachment, we will present the following case of Libby and her mother Nancy.

The case of Nancy and Libby at the time of their initial assessment has been described in detail in a previously published paper (see Schechter, Kaminer, Grienberger, & Amat, 2003). For the purposes of the present paper, we will provide therefore only a brief summary of that initial assessment, intervention at that time, and then describe more specifically Libby's follow-up using the MSSB and the FAD-T two years later.

### Initial Assessment

This 29-year-old mother and her then 16-month-old daughter came to our clinical attention following mother's having been reported to child protective services by hospital pediatricians when it was found out that she had been having doctors prescribe sedating medications for her toddler with the understanding that her child had a seizure disorder. Closer neurological and psychiatric investigation confirmed that her daughter, Libby, was manifesting paroxysmal

emotional distress that had been interpreted by Nancy as “seizures,” or in her native Spanish “ataques.” In colloquial English, “fits” was an additional term used by hospital staff to describe the events.

Nancy and her older daughter also suffered from a similar nervous condition and had been prescribed anti-seizure medications. It became clear in the course of the assessment that Nancy had suffered significant repeated physical and sexual abuse from an early age through her teen years, in the context of early maternal abandonment that followed probable domestic violence. We understood her paroxysmal falling to the floor, writhing, and headbanging as manifestations of severe affect regulation in the wake of trauma and her use of medication as a “chemical restraint” or external regulator in the absence of self-regulatory capacity. We thus understood that Nancy’s disturbance of emotional regulation had very likely impacted needed mutual regulation in Libby and Nancy’s attachment-relationship.

Observations of Nancy and Libby’s interactive behavior during free-play and separation-reunion showed multiple examples of frightening-frightened behavior on Nancy’s part and disorganized attachment behavior on Libby’s part (see Schechter et al., 2003). Overt physical or sexual abuse, and domestic violence exposure was denied by Nancy. However, we know that Libby, at least, had witnessed her mother having “ataques” in which she fell to the floor screaming and banging her head against the floor. With this in mind, Libby had shown symptoms consistent with posttraumatic stress disorder (see Schechter et al., 2003). Yet the symptoms could not be validated by the child as relating to those witnessed events. Libby of note was delayed in her expressive language development at that time.

**In terms of intervention—**Following a videotaped research assessment with a single video feedback intervention (Schechter et al., 2003), the dyad entered child-parent psychotherapy (Lieberman & Van Horn, 2005). Despite many missed visits and a limited course of fewer than 10 sessions in 6 months as described by Hatzor (2005), the following changes were noted: Within one month, Nancy’s trauma-related distress moved from somatic memory and symptoms (pseudo-seizures) to declarative memory and verbalized/symbolized emotional domain. She suffered no further somatoform relapses. An empathic focus on Nancy’s traumatic life experiences, with a) gentle confrontation of avoidance of painful affects, and b) concomitant support and stimulation of reflective functioning enabled Nancy to engage and maintain phone contact with the therapist despite missed visits.

A substantial portion of the therapeutic work involved helping Nancy follow Libby’s lead, jointly attend to her interests with her, and maintain joint attention long enough to reflect upon Libby’s perspective. A telling moment in the treatment occurred when the therapist Dr. Hatzor suggested that Nancy and Libby read a picture-book together before bedtime. Nancy returned the next day and said that they had “read together” for an hour! When Dr. Hatzor asked her to tell more about the experience, it became clear that Nancy had chosen to read a violent crime novel by herself while seated next to Libby, to whom Nancy had given a board-book. It was some days later that the mother and daughter would actually be looking at the same children’s book from cover to cover. Only gradually could Nancy begin to take Libby’s developmental and individual perspective.

In a parallel, simultaneous process, Libby’s play, which had for weeks involved being the caregiver while playing with dolls or animal figures, reached a turning point. Libby during the last session turned over her precious dolls to the therapist for care, and hugged the therapist as if to say she could give up her reversed caregiver role and be the child. Overall, Libby’s play became more reciprocal with her therapist and mother, and involved less of “reading her own book” to the exclusion of the therapist.

Efforts were made to explore the meaning of the missed visits and to reach out to the family. However, Nancy would not accept that her ambivalence towards the treatment and what it might bring up contributed to her avoiding the sessions. And when in session, Nancy often avoided making connections between her and her daughter's memories, affects, and actions, and in turn, reactions at many levels—which we also understood as defensive (Bion, 1993). This avoidance both prohibited full development of a meaningful narrative co-construction of the events that led to referral, yet it also frequently transmitted to her daughter and to the dyad's therapist the sense of meaninglessness, chaos, and isolation that haunted Nancy during her childhood (Laub, 2005).

Of note, Libby's father also never came into treatment despite many invitations and outreach. While we had suspected a stormy marriage bordering on domestic violence by both partners, physical violence had never been confirmed.

Despite the family's elusiveness, Nancy responded to our recruitment call for the follow-up study. Nancy denied any new traumatic life events in the family with the possible exception of increased marital tension since her husband's unemployment began.

The following excerpts from the videotaped assessment of Libby include the narrative about her family-attachment drawing (see Figure 1.) and the MacArthur Story-Stem Battery (MSSB) narrative that completes the story-stem entitled "Burn"

When Libby entered the consultation room, she was asked to draw her family including herself. The picture that she drew is depicted in this figure. Going left to right, the black-crayon outlined smallish figure drawing first is Nancy. The next figure is Libby, followed by "Teta" her baby sister, and Alisa her older sister. Next to Alisa is depicted Libby's doll "Ti-ti," as a head without a body.

1. The Family-Attachment Drawing Task (Interviewer's words are in parentheses.)

(And now, you're going to draw me a picture of your family.)

But, I don't know how to draw the house.

(It's ok. It's ok, you draw whatever you know how to do.)

That's my mother.

(That's your mother, ok.)

...Oh! That's me. I'm bigger.

(You're bigger, bigger than who?)

Bigger than, than, than, my [older] sister! [NB: In reality, also bigger than her mother...]

(Bigger than your sister, ok)

But, I have these eyes. Cause that one don't have no eyes, but I do. Oh, look, look, look my mouth. My mouth looks like a tiny mouse.

(What looks like a tiny mouse?)

This, right there.

(Oh, your mouth looks like a tiny mouse.) ...

... (Which sister is this?)

Alisa.

(Your baby sister? Or your big sister?)

Yup. Sometimes! Sometimes!

(Is she a big sister?)

Yeah, but sometimes, sometimes she did hit me like this! (*slaps herself in the face*)

(Oh, that's not nice.)

Nope.

(That must make you feel bad.)

Every time I tell that to my mother. And...and, and, and my mother and my big sister, they smack each other.

(They what each other?)

They smack each other like this (*makes punching motions*).

(Who fights each other? Your mother and your sister.)

Sometimes.

(Your sister, she's bigger than you or smaller than you?)

No, bigger than me!

## 2. MSSB "Burn"

(Ok, well here's the story. Mom and Susan are at the stove. Ok?)

And mom says, "Ow! I burned myself."

(Oh! Wait a minute, wait a minute. You almost...you, you, you have a good, uh, imagination ...So, here's what happens. You ready? Hands on your lap, and we're going to start! Mom says, "We're going to have a good supper, but it's not ready yet, so don't get too close to the stove. And Susan says, "mmmm...that looks good. I don't want to wait, I want some now!" (*I has doll reach for pan on stove and drop it*) "Ow, ow. Ow, I burned my hand, it hurts, it hurts!")

Now I go?

(Yes.)

And then, Susan says, she put her arm up and she say, "Ow!"

(She puts her arm up and says "ow.")

And then she says, "Ok mommy, I go sit at the table."

(I'm going to the table.)

And they say, "What happened Susan?"

(They say what happened Susan.)

So, Susan says, "I, I burned myself"

...And then mommy said, "I will pick this up."

...And she says, "I, I will clean it."

...So she had to put more sauces inside.

...And then she turned on the grill, with that button and that button hot.

... And then she said, "I cooking, I cooking."

...And then she hold it. There.

...And then she says, "supper time!"

...And then, Susan says, "great." (*C. has mom putting sauce from pan into plates on the table.*)

(What about Susan's burned hand? What did they do about her burned hand, her hurt hand?)

(*sighs*) Dad, Mom says, "Susan, we're going to take you to the doctor."

... And Susan says, "oh mommy, watch out for my mom."

(And she says what?)

Watch out for my arm.

And then she says, "Oh no, I burnt my head."

(Who? Mommy burnt her head? What about Susan's hand. What did they do with Susan's hand?)

Oh...Oh. George said, "Whoa. I better cook." (*In aggressive voice*) (*has George (brother) kick down Mommy and Susan dolls to the floor*) And then he said, "thank you."

(George is kicking everybody?)

Uh huh. But, but, George and daddy gotta cook.

(Everybody's on the floor?)

Uh huh.

(Why, why is George kicking everybody?)

Cause, cause you say (*whispers*) "be a good girl."

(What?)

(*looks around*) "I wanna be a girl." (*still whispering*)

(he says, I wanna be a girl?)

Uh huh. But a magic girl came.

(What?)

A magic girl came.

...And then George said, "Eat your food. Let me make you a girl."

...And then he said "Ahh!" (*screams*)

(How does the story end?)

The mom says, "Ahhhh.... That was hot."

(Mommy burned her head. So, mommy has a burned head and Susan has a burned hand...)

So, he has to burn hair.

...The dad go like that (*puts father doll near stove*). Ah! I burned my foot!

(So, everybody's a little bit burned.)

Uh huh. So they says, "oh, wah, wah, wah." And they like this (*has them all laying down on the ground*).

## Clinical Discussion

These narratives share the theme of role-reversal in which a helpless parent and/or hostile parent imposes her needs on the child, and in which the child takes on the burden, with exaggerated, if not grandiose, and unrealistic expectations. Both drawing-related and story-stem completion narratives share prominent dysregulated hostile-aggression between family members. More specifically, in the family drawing, we could not tell which figure represented the child and which, the mother. At one point, Libby speaks of her mouth appearing as a small helpless mouse, which is discrepant with her depicting herself as larger than her big sister and mother, and about which she is subsequently ambivalent and confused. Libby's inner world is one in which babies can become a powerful threat and adult caregivers engage in childlike fights.

In the "Burn" story, the little girl ("Susan") is left with a burn, unattended, only to tolerate the father-figure's aggression. When the interviewer brings back the concern about the injured child, the father says that she should see a doctor. But no sooner, father and mother themselves are burned and rendered helpless, and Susan never does receive medical attention. In the absence of any competent, available caregiver, a *deus-ex-machina* figure, "a magic girl" comes in to rescue the little girl. This concretization of Libby's narcissistic defenses as the "magic girl" seems to allow Libby to finish the story even as she begins to become disorganized as noted by her making suddenly random sounds. Everyone in the story ends up "a little bit burned."

Thus, the family drawing's role-reversal and confusion is echoed in both story stems, which are consistent with Nancy's initial negative and distorted mental representations of Libby as "mean, likes to hit..." and thus confused with strong adult perpetrators of violent trauma in mother's own childhood (Schechter et al., 2003).

## Summary

In conclusion, we have found to be consistent with one another two unrelated measures of child mental representations of self in relation to adult attachment figures, the Drawing Task and MSSB. Clinical implications of this study include the fact that these two measures, both of which involve direct-response from and observation of the child in very different modalities, are useful complementary methods for assessment of the young child's representational world in the wake of trauma affecting the caregiver. These measures, applied in this study to a referred sample, may also provide a clue to psychological processes underlying the intergenerational communication of violent trauma. Better understanding of such processes is crucial for the development of effective interventions to interrupt cycles of violence in families with very young children who are undergoing formative development of the capacity for emotional regulation and social cognition.

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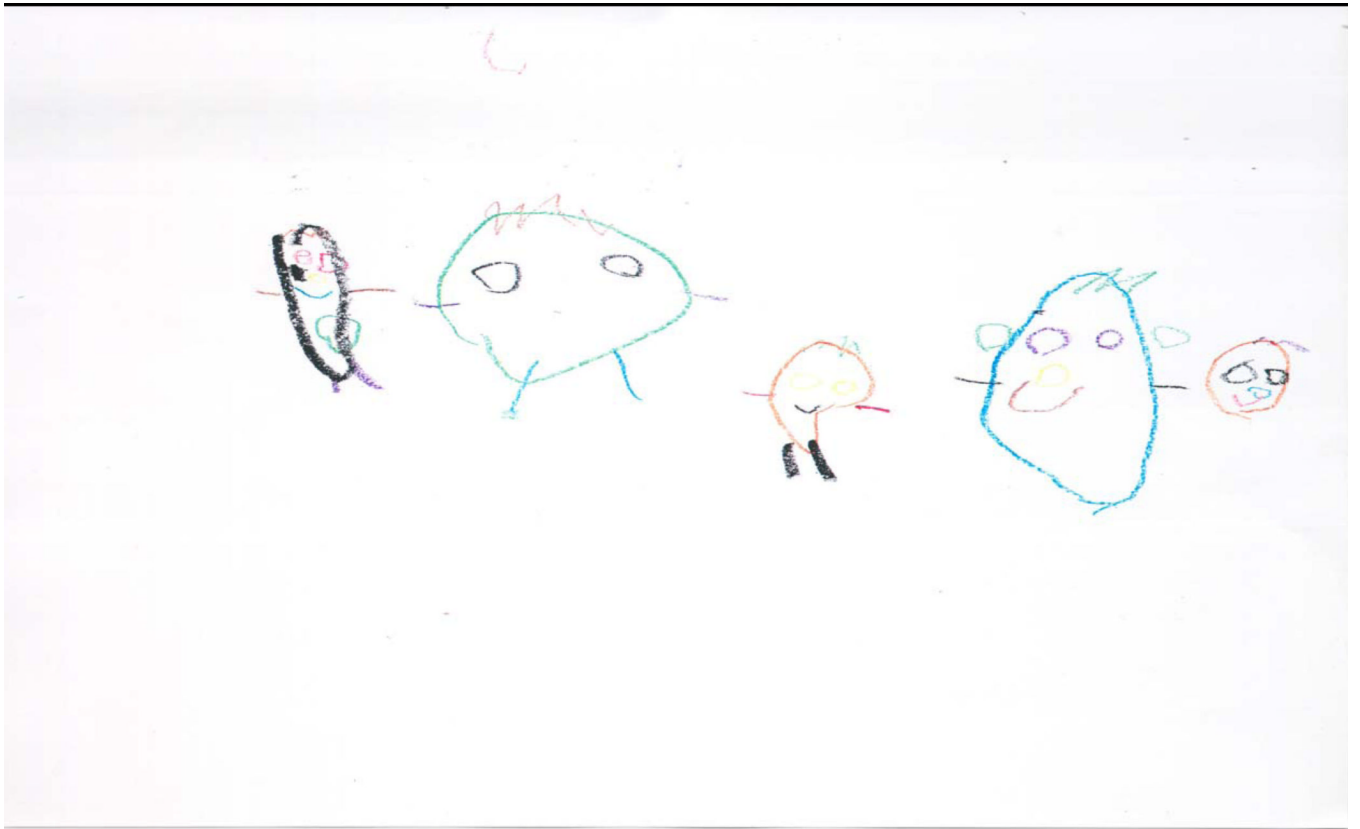
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**Figure 1.**  
Libby's Family Drawing at Age 4.

Relationship of Selected MSSB Dimensions to Family Drawing-Attachment Classification and Disorganization (N=23)

Table 1

MSSB Dimensions	Secure?	Mean	SD	N	Effect Size	ANOVA: Associations with Family Attachment Drawing Measure Classification (Secure vs. Insecure)		Correlations with degree of disorganization		
						F	df=1,21	p	r	p
<b>Aggregate of Content Dimensions Listed Below</b>	Yes	.32	.67	7	1.33	8.75		.007	.54	.007
Dysregulated Aggression	No	1.66	1.11	16						
	Yes	.29	.22	7	1.13	6.24		.021	.44	.036
	No	.74	.45	16						
Danger and Distress	Yes	.23	.27	7	0.40	.69		.420	.05	.828
	No	.34	.28	16						
Avoidance/Withdrawal	Yes	-.35	.27	7	1.10	6.01		.023	.63	.001
	No	.15	.51	16						
<b>Narrative Coherence</b>	No	.65	.18	7	<b>0.88</b>	<b>3.69</b>		<b>.068</b>	<b>-.40</b>	<b>.056</b>
	Yes	.39	.33	16						