

Identifying Therapeutic Action in an Attachment-Centered Intervention with High Risk Families

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Abstract This paper describes an attachment-based intervention for mothers known to Child Welfare Services where past and current trauma complicates family preservation and promotion of child well being. The first part of the paper describes the innovative Attachment-Centered Parent–Child Therapy service that has been delivered to high-risk families with children from 0 to 3 years of age. The intervention uses a group format that has the added benefits of enhancing social support and being highly cost effective. The intervention also integrates video filming both in terms of capturing essential features of the group intervention for review and supervision of clinical staff, and is fundamental in the observation-based empirical assessments. Quantitative data from an initial pilot study supporting the efficacy of the intervention is presented. As well, qualitative data is presented including a case study that highlights therapeutic action shown to positively impact the quality of the mother–child relationship.

Keywords Intervention · Attachment theory and research · Trauma · Infants · Intergenerational influences

Introduction

Attachment theory stresses the importance of the primary caregiver's sensitivity to children's emotional development and ultimate mental health, with particular attention to the quality of caregiving during infant and toddler years. This paper, being written by clinical and developmental psychologists, does not attempt to review the substantial and relevant social work literature on maltreated children, their parents, and efforts to improve their lot. Instead, we rely on mainstream applications of attachment theory and research to mother-toddler clinical problems, and hope that the methods and theory presented are seen to have relevance to social work. There is growing evidence that attachment-based interventions can significantly enhance the quality of the parent child relationship in at-risk populations (Berlin et al. 2005; Heinicke and Levine 2008; Lieberman and Van Horn 2008; Marvin et al. 2002; Oppenheim and Goldsmith 2007; Toth et al. 2006). This paper will describe the work of an attachment-based intervention that has been specifically designed to engage hard to reach, high-risk families with infants and young children. The second part of the paper will describe ways of assessing therapeutic change through the use of empirical assessments. These assessments have been chosen to best identify domains of development specifically targeted by the intervention such as reflective functioning in the parent (Fonagy et al. 1998; Steele and Steele 2008), and quality of attachment in the child-mother relationship (Ainsworth et al. 1978). The final section will present a case study to illustrate how subtle changes can be observed in the context of the clinical work and research assessments aimed at tracking evidence of positive change arising from work with these multi-problem families.

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A Clinical-Research Endeavor Aimed at Preventing Child Maltreatment

This paper is a collaborative effort between the ongoing clinical work at the Center for Babies, Toddlers and Families (CBTF) at the Albert Einstein College of Medicine, and the Center for Attachment Research, at the New School for Social Research. The CBTF, a division of the Early Childhood Center is linked into a wide set of services including multi-disciplinary assessments, individual treatment, pediatric mental health, (Briggs et al. 2007) family court, foster care and preschool consultation and the parent–child psychotherapy program. Overall over 400 families are treated at the Early Childhood Center annually.

At the CBTF, the parent/child psychotherapy group model was developed and has evolved over the past 5 years to meet the needs of a very isolated group of parents who are referred because of their own history of multiple adverse childhood experiences and ongoing exposure to poverty, domestic and neighborhood violence. Importantly, these parents are seeking help in creating a more adaptive environment for their children than was available to them as children growing up. Many describe histories of abuse and neglect during their childhoods in the 1980s, in the Bronx, NY, a time when substance abuse peaked. Accordingly, many of these young parents report experiences of parental substance abuse which caused disruption in their young lives placing them in unprotected situations where they were abused and neglected, often leading to multiple foster placements.

Rationale for the Therapeutic and Research Approach

The need to identify therapeutic action that promotes observable change is especially important in the context of clinical work with vulnerable mothers and their toddlers where there is a high likelihood of attrition. In working with mothers, living as they do with low socio-economic status, high current life stress, and frequently having past trauma and loss, an intense effort must be paid to motivate them to engage with intervention efforts. The substantial risks to psychological and physical health of failing to intervene, or failing to intervene successfully, are well established. There is, for example, a well researched, hard-to-break cycle of risk across generations including poverty, crime, psychological distress, and physical illness (Caspi et al. 1996; Dube et al. 2003; Felitti et al. 1998).

Over the past 20 years, prevention and intervention programs grounded in attachment theory and research have greatly increased, showing positive results in enhancing both maternal and child mental health (e.g. Berlin et al. 2005; Juffer et al. 2007; Lieberman et al. 1991). These

programs range in duration from eight sessions to programs extending over 2 years. Brief attachment interventions appear to work best when there is a discrete problem (e.g. an irritable cranky infant) that the mother is helped to resolve via the promotion of maternal sensitivity. By contrast, intervention work with high-risk multi-problem families typically involves weekly therapeutic sessions over 1 year. The approach that has the strongest empirical base, with five randomized trials in different laboratories, is Child-Parent Psychotherapy (CPP) developed and recently detailed by Lieberman and Van Horn (2008). Lieberman and Van Horn (2008) highlight three domains that define early mental health: the young child's capacity (1) to experience, tolerate and express a range of emotions without lasting emotional collapse; (2) to form mostly lasting and trusting relationships; and (3) learn the culturally expected skills appropriate to a child's age. CPP addresses each of these domains through the vehicle of the child's primary attachment relationship. CPP has been shown to be effective, based on a model of an individual therapist working with a mother and child, for families whose risk context includes maternal depression, poverty, domestic violence, mothers with trauma histories, and maltreated children known to preventive services (Cicchetti et al. 2000, 2006; Lieberman et al. 1991, 2005). The findings show that this treatment approach results in reduced child and maternal symptoms; improvements in the child-mother attachment relationship; and improvements in child cognitive functioning. The specific treatment intervention described in this paper has been heavily influenced by the CPP model advanced by Lieberman and Van Horn (2008). The cultural context of urban poverty in the Bronx, paradoxically including crowded living circumstances and social isolation, have led us to modify features of the CPP approach. The format that has been developed serves to offer a cost effective intervention that limits attrition and diminishes the social isolation felt by the families. In order to manualize the approach, discussion and careful review of many diverse video filmed subsets of sessions informed the descriptions that emerged of the ongoing therapeutic approach, something successfully relied on in past attempts to refine intervention work (e.g. Suchman et al. 2007). Preliminary work aimed at codifying the intervention followed in this vein. Over 30 h of video taped footage of the actual clinical intervention was collected in order to describe in detail the success of the clinical techniques. Success was evident in the delight and understanding expressed on the films, but also in the subsequent reports made by both therapists and clients. This bolstered the confidence of the group who developed the manual, a guide for how best to enact and respond to the clinical process aimed at improving parent–child relationships in challenging multi-problem contexts.

Method

Sample

The group is designed for families where there is a serious concern about parents' struggle in effectively meeting the emotional needs of their young children in a consistent, predictable manner, where there is a documented concern about actual or possible child maltreatment. This particular model of intervention has been especially designed to meet the needs of three types of vulnerable families: (1) families receiving preventive services where the goal is to keep the highly stressed family intact; (2) families suitable for inclusion include those known to protective services where there has been abuse and/or neglect and the goal is to try and reunify children with their families; (3) families who come to the clinical attention from other agencies where there is concern about the parent's interactions with their young child are also appropriate participants. The families who comprise the focus of this report are 27 mothers and their toddlers (who were aged 12–36 months at the time of the lab visit described below). Note how the case study refers to an observation conducted in the therapy group at 7-months, indicating how the families were affiliated to the clinical service for 6–12 months prior to the lab visits described in the quantitative results. Also, note how some families have been seen twice in the lab, but this paper refers only to the first lab visits, with the exception of the case study that reports on both the first and second lab visits.

Mothers were aged between 20 and 41 years, with a mean age of 28 years. Ethnically, with respect to these mothers, 5 (19%) were Caucasian; 14 (52%) were Latino; and 8 (29%) were African-American. Ethnically, with respect to their children, 2 (7%) were Caucasian; 12 (44%) were Latino; 9 (33%) were African-American; and 4 (15%) were Bi-racial. One-third of the children (9) were girls while two-thirds (18) were boys. The results reported below were unrelated to ethnicity or child gender.

Structure of the Intervention

The structure of the attachment group model has three distinct components. The 90-min twice-weekly intervention begins with a joint segment when parents and children are together, followed by separate parent and child groups and concludes with a reunion. The three segments are briefly described below.

Parent/Child Group

The joint parent/child group component provides group support (one mother to another, one child to another) and

cohesion. This enables very isolated parents and children to form friendships and become part of a group of parents facing similar challenges. The parents are helped to engage with their children through play, non-verbal attention, and infant-directed descriptive speech as they endeavor to create a climate of nurturing support. Infant-directed descriptive speech is also aimed at the mother as when a therapist says: "Oh, look, I think he wants to show you, mom, what he is holding." For many of the parents this environment of respect sits in contrast to the harsh experiences and representations of their own impoverished childhoods alongside their current experiences of living in violent neighborhoods that are the context in which they are raising their children. This segment of the intervention proceeds with what may seem to the naïve observer to be the ease of a simple playgroup but is radically different as it is clinically infused with therapeutic technique and understanding to help parents see the absolute importance of becoming a secure base (and safe haven) for their young children.

The introductory phase of joint group activity then moves so that each mother and child are helped to find an activity. Clinicians are trained to intervene in sensitive and brief ways for example, offering a blanket or bottle to a mother to give to her toddler girl holding a doll. The goal here is to facilitate sustained (for 10–15 min) parent/child play, which for some parents is a considerable amount of time! This section of the intervention most closely emulates the traditional Child-Parent Psychotherapy approach as it is almost an individual mother–child pair per clinician. In the service of helping parents work towards building an emotionally reciprocal relationship with their child, therapists gently encourage joint attention and shared affect between mother and child in the context of exploratory or pretend play. Depending on the age of the child developmentally selected basic toys are made available (e.g. bubbles, play telephones, cardboard boxes, blocks, animal families, puzzles are among the simple choices deliberately preferred over high-tech toys). There is a deliberate effort not to present too many toys so as to convey to the parent that the relationship is the focus of the intervention rather than the toys that are instrumental in attracting their child's attention and bringing about positive change.

The Children's Group

The second component involves a parent/child separation placing some stress on the child whose attachment system is activated. Over time, parents see how difficult it is for their children to be without them and are guided to reassure their young child that they will soon return to them. Some parents are tempted to sneak out silently, which can initially seem to work, but the therapist's role is to intervene

and convey that it may be more helpful to say goodbye, while empathizing with the child's tears and thereby facilitating a more trusting parent–child/child–parent relationship. While the parents then meet separately for 30–45 min, the children are with therapists who aim to facilitate age-appropriate peer interactions (e.g. side-by-side and then joint pretend play among children). Validation and praise of sharing, and waiting one's turn, is a common theme to toddler-directed speech by therapists. Acknowledgement of negative emotions, particularly in respect of the child's yearning for mother to return, is another common theme to therapist–infant or therapist–toddler speech.

Above all else, the children's group is guided by therapists aiming to develop within the children an expectation that a strong attempt will be made by adults to understand their thoughts and feelings. The ratio of therapists to children is 1:2 or 1:3. Play may be solitary or peer relationships may be the targeted goal—therapists follow the child's lead. Time is spent, as is necessary, reassuring children that their parents will return.

The Parent Group

The parent group serves multiple purposes. The group format has been designed for a high-risk population of marginalized families with impoverished social support so that the group provides the possibility to forge new relationships with peers both during and outside of the intervention context. Importantly, group formats have also been demonstrated to be 50% less expensive than home-visiting interventions. A primary benefit of the group is evident when observations by members of the group facilitate therapeutic goals. For example, it is often a catalyst for change when another mother in the group speaks in an empathic way about a mother's strengths and difficulties. Examples of themes that parents often bring to the group include: children's self-regulation difficulties, educational issues concerning their children, their own emotion regulation difficulties, their own frustrations with their children, issues of their own abuse (physical and sexual) or other difficult childhood experiences, relationships with men (abusive and non-abusive), practical daily living issues (not having enough food, school supplies, etc.), challenges in interactions with institutional systems such as schools, child protective systems, housing systems, and more.

Reunion

Prior to the reunion that follows the separate parent and child groups, the toddlers are asked to help clean up and get ready for the mothers who are coming back soon. Mothers, meanwhile, are being asked to focus on re-entering the

room as each child will be expecting their parent's return. The parents often feel refreshed after having some time apart from their child, many of whom do not routinely get the opportunity to have time alone from their young children.

Primed perhaps by the somewhat challenging discussions in the parent-only groups, mothers are often genuinely eager to be reunited with their children. Central to attachment theory and research is careful attention to separation and reunion behavior observed between caregiver and child that form the basis of the laboratory-based research assessment, the Strange Situation (Ainsworth et al. 1978). In many ways one may view the final part of the therapeutic sessions as a remedial Strange Situation. This is the case because the reunion helps parents see just how important they are to their children. The full 90-min to 2-h session has kept in focus for them that there is a tight family connection linking each child to his or her mother.

Hypotheses

Lab-visits to the Center for Attachment Research at the New School, on which the data to be presented are based, took place once when the families had been attending the intervention group for at least 6-months or more. The quantitative hypotheses of the study were that families in which mothers reported higher rates of adverse childhood experiences would be most vulnerable across observed domains. We also hypothesized that as the intervention took effect we would find discernable improvements in the mothers in terms of higher capacities for reflective functioning and more coherent narratives as assessed in the Adult Attachment Interviews, more sensitive parenting as assessed by the parent–child observational tasks, and lower levels of perceived parenting stress. In the children we hypothesized that the intervention would result in more security and less disorganized features of their attachment, fewer number of reported behavior difficulties.

The qualitative hypotheses of the study included the assumption that review of video-filmed interactions within the therapy group would reveal readily identifiable moments of positive mutative therapeutic action.

Research Measures

The research component was designed to specifically explore two broad domains: critical features of the population served by the intervention in terms of previous adverse history and indices of measurable positive change in both mothers and children as a presumed result of the therapeutic intervention.

Adverse Childhood Experiences Questionnaire

An important aspect of the study was to better define what is meant by the term “high risk”. Using an attachment framework puts great emphasis on parent’s childhood experiences as one of the single most predictive quality of parenting across generations. To this end, specific features of the backgrounds of the families involved in the intervention were gathered by administering the Adverse Childhood Experiences questionnaire or ACE. This measure was first used in a large epidemiological study of a managed care health group in California showing the long term deleterious physical and mental health effects of child maltreatment (Dube et al. 2003; Felitti et al. 1998). Specifically, where experiences of psychological, physical or sexual abuse; violence against mother; or living with a household member who abused drugs or alcohol, had mental illness, were suicidal or had been incarcerated was listed, there was a highly significant link to ten leading causes of adult death and disability. The 25-item ACE survey used in the current work included discrete mention of 22 types of neglect, rejection and abuse and 3 indices of supportive care.

The Adult Attachment Interview

Beyond mothers’ adverse histories, the research sought to obtain a measure of the meaning mothers’ attributed to their attachment histories. This was obtained via administration of the Adult Attachment Interview or AAI (George et al. 1996) and applying the standardized coding system (Main et al. 2008), yielding a reliable appraisal of an adult’s current state of mind concerning attachment, which is particularly relevant to parent-infant work (Baradon and Steele 2008). The interviews reported on below were each independently coded by the 1st and 3rd authors, with high levels of agreement (22/24 or 92%) on the four-way classifications with the two disagreements settled easily via discussion. With respect to the 9-point rating scales agreement between raters was uniformly high (median intra-class correlation = .81, range = .70–.94).

The Strange Situation

The child–parent relationship is observed with the Strange Situation Paradigm (Ainsworth et al. 1978). This gold standard measure allows us to gain a picture of the extent to which the mothers are socially transmitting their trauma history to their young children. Where disorganization in the toddler–mother attachment is observed it is to be assumed that mother’s past (or current trauma) is adversely effecting her toddler’s attachment to her. Where organization (security, avoidance or resistance) is evident, it is to

be assumed that the toddler–mother attachment is possessing resilience. Toddler–mother attachments were classified by a PhD student who was trained to a high standard of reliability in coding Strange Situations by Elizabeth Carlson, University of Minnesota. This researcher was blind to maternal AAI status when rating the toddler–mother attachments.

Parenting Stress Index

To enhance the profile obtained of the child and mother’s functioning more generally levels of parenting stress across diverse domains are being accessed via the Parenting Stress Index, previously validated and extensively used in clinical research.

Results

Quantitative Results

This first section results reports on 27 mothers who had attended between 29 and 85 intervention sessions (mean = 63)—thus yielding an estimate of how families might look post-treatment.

Toddler–Mother Attachment

Thirteen toddlers, aged 12–36 months, were observed in the Ainsworth Strange Situation procedure (Ainsworth et al. 1978), and also classified as either secure or insecure (avoidant or resistant) or disorganized/disoriented (after Lyons-Ruth and Jacobvitz 2008). Those infants classified as disorganized were also assigned to their best-fitting alternate classification, secure or insecure. Ratings of the 7-point interval scales applied to reunion behavior, proximity seeking, contact maintenance, avoidance and resistance, were also rated. All video-films were double coded and high levels of agreement >92% (12/13) on classifications, and inter-rater reliability (median $r = .92$, range .79–.98) on the 7-point scales. Of the 13 toddler–mother pairs observed, 46% (6/13) were judged disorganized and the remainder 54% (7/13) were all deemed securely attached. More impressively, the forced alternate classification for the six disorganized toddlers was secure for 83% (5/6), with one being otherwise insecure-resistant.

Adverse Childhood Experience (ACE)

These surveys revealed a pattern of highly adverse childhood experiences in the first 18 years of the mothers’ lives. The ACE presents 25 potentially traumatic scenarios that may have happened in one’s childhood and the task for the

adult respondent is to indicate that this happened never = 1, once/twice = 2, sometimes = 3, often = 4, or very often = 5. Items where the median response value was 4 or 5 (often/very often) included having been verbally abused as a child, made to feel frightened of being physically harmed by a parent, being physically beaten so that it left bruises or marks, and being witness to father hitting, slapping, or punching mother. Additionally, some of the 25 ACE items require a no/yes response, yielding percentage counts of who has experienced certain adverse experiences. For example, 52% (14/27) of the sample of mothers had sexual intercourse with an adult before the age of 18; 70% (19/24) grew up living with a problem drinker; 89% (24/27) of respondents grew up in a household where there was one or more adults who were mentally ill; 96% (26/27) had parents who divorced during their childhood; and only 46% of the sample (11/24) said that it was often or very often the case that they knew there was someone to care of them and protect them. Fifty-four percent of the sample did not have this confidence that there was an adult to care for them.

Adult Attachment Interviews (AAIs)

AAIs were obtained from 24 mothers. Overall, 54% (13) of the interviews were judged unresolved with respect to past loss or trauma, 25% (6) were judged insecure-dismissing, with 13% (3) judged insecure-preoccupied, and 13% (3) were judged autonomous-secure. Including the fifth category of AAI response typical in clinical samples, namely the Can not Classify assignment, it is noteworthy that 33% (8) of the interviews fit this troubled profile where contradictory states of mind (e.g. dismissal *and* preoccupation) are observed and are usually only reported in criminal, psychiatric and highly traumatized populations. These ratings revealed low averaged scores for probable experiences of love or support (mean = 3.14, SD = 2.34), and high scores for probable experiences of rejection and neglect (mean = 6.83, SD = 2.82). Scores on those scales meant to tap resilience and the capacity for sensitive caregiving were low in these interviews, e.g. reflective functioning (mean = 2.29, SD = 1.23), and coherence of mind (mean = 3.45, SD = 1.35). If we assume that prior to beginning the intervention, mothers would have presented with these same types of troubled insecure responses to the AAI, and that correspondingly their toddlers' attachments would have looked primarily insecure or disorganized, then speculation on how the intervention may have impacted the mothers and children can be advanced. These preliminary results suggest that the attachment-centered intervention primarily impacts upon the toddler–mother relationship in the present, and only secondarily (with less power) impact upon the mothers' state of mind about their attachment histories.

ACE and the AAI

There were a number of significant correlations observed between the ACE survey and the dimensional rating scales applied to the AAIs. Specifically, survey reports of adverse childhood experiences were confirmed by probable attachment history ratings made of the mothers' accounts of their childhood provided in the AAI (e.g. reporting high levels of physical abuse in the ACE correlated positively and significantly with AAI ratings of having been rejected by one's mother during childhood, $r = .73, p < .0001, n = 24$).

Additionally and importantly, ACE was seen to impact upon current state of mind of the mothers, in parent-specific terms to do with affect regulation. For example, reporting on the ACE “not having enough to eat growing up” and “having to wear dirty clothes growing up” correlated significantly and positively with derogation of mother in the AAI ($r = .59$ and $r = .60$, respectively, both $p < .005, n = 24$). Similarly, reporting in the ACE that “parents were too drunk or high to care about family” growing up correlated positively and significantly with derogation of mother ($r = .76, p < .001, n = 24$). Derogation of father in the AAI was positively and significantly linked to reporting in the ACE “being physically hit so hard it left bruises or marks” ($r = .50, p < .05, n = 18$). The smaller sample size for state of mind re: father reflects how for 25% (6/24) mothers interviewed, they had no recall for their fathers from childhood owing to these men's absence from their children's lives. Links between the ACE responses and the AAI overall state of mind scales such as coherence of mind or reflective functioning—taken to indicate a propensity for overcoming adversity and delivering good enough care to a child (despite past difficulties) were also found. For example, mothers who reported having been “bruised or marked” by physical abuse during childhood showed significantly less evidence in their AAIs of coherence of mind ($r = -.47, p < .05$) and significantly less evidence of reflective functioning ($r = -.65, p < .001$). By contrast, mothers who reported having felt loved as a child in the ACE provided AAIs that were rated significantly higher for reflective functioning ($r = .66, p < .001$).

ACE and the Toddler–Mother Attachment

Two adverse childhood experiences reported by the mothers distinguished the toddler–mother attachment groups. These were (1) fear of being physically hurt by a parent as a child; and (2) actually being hurt so hard it left bruises or marks. Mothers of the toddlers judged to be disorganized scored significantly higher on these two indices of physical abuse experience as compared to mothers of toddlers judged securely attached. These results were observed via independent-sample *t*-tests, where the

t-values were 1.86 and 2.00, respectively, for these two results ($p < .05$).

Adult Attachment Interviews and the Toddler–Mother Attachment

This link between maternal state of mind about attachment and the child–mother attachment is among the most extensively replicated findings in developmental psychology (Main et al. 1985). Two observations from the pilot data fit with this existing literature: (1) If a mother was securely attached in her AAI ($n = 2$) both of these children were securely attached in the Ainsworth procedure; and (2) five of the six (83%) toddlers who showed disorganization in the Strange Situation had mothers whose AAIs were judged unresolved or Can not Classify with respect to past loss or trauma. At the same time, 57% (4/7) toddler with secure attachment had mothers whose AAIs were unresolved or CC, so the intervention (from this pilot study) would appear to have been making a stronger impact upon the toddler–mother relationship than upon the maternal representations of attachment stemming from her troubled childhood. This suggestion is, of course, based on the assumption that the toddlers' initial attachments to their mothers, prior to beginning the intervention, were predominantly insecure and disorganized (as is common in these samples with such high levels of trauma typifying the mothers). Our ongoing prospective work with this community, including repeat assessments of toddler–mother attachments, will test this assumption.

Parenting Stress Index-120 and the AAI

PSI-120 (with 14 subscales tapping different sources of stress in mothers' lives) was obtained for 18 mothers who also provided Adult Attachment Interviews (AAIs). Interestingly, the PSI subscales when grouped by a 2-way split of AAI data yielded some significant results pointing to the vulnerability of mothers whose AAIs were classified unresolved with respect to past loss or trauma or whose AAIs were so confusing and troubled as to be called Cannot Classify (CC). These pilot results stemmed from separating the 18 AAIs into two groups, one with organized states of mind (secure autonomous = 3, and dismissing = 2) in contrast with disorganized states of mind (unresolved regarding post loss/trauma = 10, and Cannot Classify = 3). Five of the 14 PSI-120 sub-scales, when grouped by whether the respondent was organized ($n = 5$) or disorganized in response to the AAI ($n = 13$), yielded significant differences in independent samples *t*-tests ($p < .05$, two-tailed tests). These results showed that mothers with disorganized/U/CC AAI responses reported significantly more parental stress in terms of their feeling

less competent as parents, less acceptable, less well attached, and viewing their children as significantly more demanding, and more of an imposition on their personal freedom (role restrictions).

Case Example: Therapeutic Action

Therapeutic action has been a central area of interest to clinicians from every treatment modality and has been the subject of intensive study. As mentioned earlier in order to draw up the manual describing this attachment-based intervention, we captured 30 h of video footage of the different group settings. We then reviewed this film in the context of a study group at the Center for Attachment Research at the New School. This group included the authors of this paper, and a talented group of students studying for their PhD, MA or BA degrees. Following discussions of what material is most salient and why, individual students took away film clips and worked up narrative sequences describing the behavior on film. These notes were then discussed in the group in the context of reviewing again the actual filmed behavior. In this way, we drew closer to identifying both what constitutes the ongoing clinical intervention, and what comprises the most likely agents of change in behavioral and emotional sequences typifying exchanges among parents, children and therapists. Often subtle interventions involving a few words or gestures from the therapist seemed to effect powerful change on the model of therapeutic moments as conceived by Stern et al. (1998). These significant moments of change could be identified on film in reliably observed sequences that clearly moved the partners to the interaction toward organization, emotion-regulation, and joy. Sometimes, the positive impact of an event in time, an exchange, a comment or gesture, was immediately apparent. At other times, the impact only became obvious days or weeks later when a similar event occurred prompting the therapist to make a link between the present and the recent past, contributing the internalization of growth-promoting insight. Below, some flesh is put on these global remarks about therapeutic change via clinical and research-based vignettes from the ongoing work. Importantly, we highlight value of video-film as a tool for consolidating therapeutic change when it is played back to a mother who is much in need of evidence that may attest to her competence, and her child's appreciation of her.

Case Illustration 1: Rosanne and Hugo

Background to Rosanne's Story

One telling example of a mother and child in treatment, and how they have fared in the intervention follows here.

Rosanne and her young son Hugo. Rosanne is a 37-year old mother who was referred with her seven-month old son, Hugo, by the child's Legal Aid attorney in Family Court due to concerns regarding the child's exposure to domestic violence in the home. Rosanne has a diagnosis of bipolar disorder, for which she receives therapy and medication. In addition, she surrendered custody of another child 10 years ago when that baby was a few months old. She is struggling to maintain custody of her young son as she copes with volatile moods. She repeatedly speaks about how family members refer to her as a "disgrace to motherhood". She is living on public assistance and is quite resourceful, collecting "bottles and cans" for deposit money to supplement her income and pay for much needed diapers. On the ACE screening measure, Rosanne acknowledged six adverse childhood experiences including verbal and physical abuse, parental alcoholism, and exposure to domestic violence between her parents, parental mental illness, and parental incarceration.

Rosanne and Hugo in the Attachment Group Intervention

In the group, Rosanne seemed to experience a great sense of relief, and showed herself open to change. Over time, she would come to call the group her "safe haven". She often referred to the group as her "time out with her baby" from all of the stresses and troubles she experienced in her home.

Early on the clinicians were aware that Rosanne often seemed preoccupied which resulted in a sense that there was a serious lack of attunement between mother and her 7-month-old son as her gaze would often drift off as he struggled to make eye contact with his mother. One of the first interventions with this dyad involved the clinician noticing how mother and son while seated next to each other were not really in one another's orbit of engagement. In order to bring them together, one clinician shifted young Hugo's bottom so that he was facing his mother directly. She handed Rosanne a simple tunnel-like see-through toy. The way was now prepared for Rosanne to look directly at her son and he at her, through a tunnel that screened out all images but the sight of one another. This gentle maneuvering was critical as was the use of an object with which to gain the intended outcome of having this mother attune to her son.

This vignette came to our attention upon reviewing a busy sequence of film from a parent-child group where many different things were happening among the many eight different children, their mothers, and the therapists in the room. Yet, in this simple interaction with the tunnel-like see-through toy initiated by the therapist and responded to with interest by Rosanne and Hugo, a moment of change in this mother-child relationship was initiated.

Mother and son had come to see one another in a new way. This section of film was later played back to Rosanne. Rosanne was shocked. She herself picked up on how she was looking around without focusing on her son at all. She then commented on how much better she looked as a mother, when she used the tunnel. She said, "Hey I am not such a disgrace to motherhood, look at that!" Much the same way Rosanne grew to see the group as a "safe haven" clinicians worked to help this mother see that she must work to position herself to be her son's safe haven and secure base.

In a later session, 3 months later when Hugo 10 months old, the therapist made creative use of metaphor to shore up Rosanne's faltering sense of herself as worthy of her son's love. During the parent-child group, the therapist came over to Rosanne and Hugo who were sitting at a small table with Play-Doh. Anne picked up some Play-Doh and formed it into a nest. She then recruited help from Roseanne (and Hugo) in shaping some birds, including a mother bird and several baby birds. Some discussion about bird habits followed. This served as a multi-modal (verbal, visual and tactile) memory that helped Rosanne see herself as a secure base for her son in much the same way she was beginning to see the group. In weeks that followed, Rosanne on her own would form Play-Doh nests with baby birds, explaining to Hugo "no matter what, the mommy bird always comes back to take care of the baby bird." This intervention with the metaphor of the bird's nest became in Stern's terms, a turning point moment for Rosanne. Similarly, this nest building moment may be seen as a fresh start for Roseanne, a move away from her history of mandated separations from her children. The repetitive play with the bird's nest served to consolidate in her mind how despite having surrendered custody of an earlier child, she would not abandon Hugo. She would always come back to Hugo, and she had come to this sense of commitment through coming to the therapeutic group toward which group members feel a strong sense of loyalty.

Roseanne and Hugo at the Center for Attachment Research

At the Center for Attachment Research we can reliably assess indications of change on previously validated and widely used measures of emotional well being. These measures are administered to families early on in treatment and then again during a follow-up visit 1 year later. During the first Strange Situation with Rosanne, Hugo showed a mixture of almost all the Strange Situation classifications and there were sufficient bizarre and frightened behaviors that his initial attachment to Rosanne was classified as disorganized, marked by an anomalous combination of avoidance (hypo-activating behaviors) and resistance (hyper-activating behaviors). For example, after not

seeming to notice that his mother left during the first separation, he dissolved into tears and lay on the floor crying as the stranger approached. When his mother returned she was unable to comfort him and his hunched up prone posture appeared to mimic that of a frightened small animal.

This troubled initial picture of Hugo at 1 year in the Strange Situation was echoed by multiple contradictory themes in Rosanne's Adult Attachment Interview. The interview was classified preoccupied (with high Anger scores with respect to father), dismissing (idealizing with respect to mother and derogating of father) though no tangible signs of unresolved mourning could be detected regarding her history of trauma. The technical term for this kind of interview is Can not Classify owing to its hyper-activating (preoccupied) and hypo-activating (dismissing) states of mind.

An example from Rosanne's Adult Attachment Interview conveys the essence of her current representations of her confusing and frightening childhood experience. For example when Rosanne is asked **"Describe what it was like with your parents as a very small child"** her response is as follows;

"Well, to describe it was like a horror house with an innocent mother with four little children and a monster as a father; that used to drink, you would have to wonder if daddy is coming home, Is he mad? Is he drinking? Is he gonna slap mommy for no reason? Is he gonna beat up mom and at nighttime take what he wants, which is rape? Where you would wake up and your mother busted mouth. Or you would wonder if my mother going to the store and my fathers like watching her and coming to the store and just deciding "BOOM!" right in the mouth, for no reason. We had food, we had clothes, we had everything, but we was not in a happy home."

An indication of her Pre-Occupied state of mind is evidenced by her high scores for role reversal where she took on a parentified role. In response to the interview question **"As you think about your relationship to your mother as a supportive one, what comes to mind?"** Rosanne responded as follows:

"Yes., I used to support my mother every time she used to get hit. I remember when I was little and I used to help pick up things from the floor and talk to my mom. And I remember my mom used to not wanna eat in the morning because she was depressed and I remember myself making toast for my mommy and making coffee but it would be cold and how my mother, I used to go up the little stairs as a baby and say "mommy eat! You can't get sick!" And my mother

would actually drink the cold coffee to make me happy. She used to just act like she's happy and she used to sit me by the bed and I said "Mommy your not happy", "Yeah, baby girl, I'm happy", "Mommy your not happy", "Yes I am" and then I said "Mommy what happened?" "Oh, mommy bumped into the chair" and everything else. "Mommy don't lie to me cuz I was right on the stairs and I saw daddy punch you right in your mouth." "Daddy didn't mean it, daddy got problems, daddy had a bad day, mommy didn't make sure the house was clean."

A further example of a classification of her interview as Preoccupied is her high scores for current anger with her father as indicated in her response to the following interview question, note especially how her response reverts back to the use of the present tense (as in "he don't deserve it"), despite being asked about the past: **"When you were upset as a child, what would you do?"**

"I used to cry and talk to my mom. I used to answer my father back. I used to roll my eyes at my father I used to curse at him, tell him to kiss my ass! I would never give him respect because to be honest he don't deserve it. "

Rosanne's low reflective functioning score and reliance on a Dismissing stance can be seen in her response to one of the interview questions in the AAI that demands a reflective stance.

In general, how do you think your overall experiences have effected your adult personality or the kind of person you are today? Rosanne responds as follows:

"It didn't effect me, it just taught me how to be a more loving person. But I'm a loving person but people also walk all over me and I don't express my feelings, I just keep on taking it."

The next interview question is another that specifically probes for a reflective stance. Rosanne derogates her father, and idealizes her mother. The interviewer asks: **"Why do you think your parents behaved as they did during your childhood?"**

"Because my father's a jackass and my mother was a person who wanted all four kids together. She just wanted to keep the family together."

These contradictory states of mind presented by Rosanne in her AAI, an intense wish to keep the family together (her own as well as her mother's) together with her deep and consuming hatred toward her abusive father made almost inevitable a high dose of fearfulness in her interactions with her young son. Thus, it was not surprising to the clinical team when the initial (baseline) observation

of baby Hugo's attachment to mother revealed a high level of disorganization (lying prone, flopping around), suggesting Hugo finds mother frightening and unpredictable. One year later, after much work with his mother in the Attachment-Centered Parent–Child Therapy, Hugo's attachment to Roseanne had settled into a largely organized anxious avoidant pattern, but with some discernible signs of disorganization, albeit far more subtle than 1 year previously. For example, he would walk quietly backwards, facing mother, and showed other quiet non-verbal signs of disorientation and marked apprehension in her presence. The rating assigned for disorganization was one point lower than a year previous, representing diminished fear, and increased organization. Roseanne's follow-up Adult Attachment Interview revealed that internally (with respect to her past) she was still struggling with the same issues, but the classification profile had settled in a direction consistent with her son's avoidance. That is, Roseanne's follow-up AAI was primarily dismissing and derogating as regards her abusive father. There was much confidence conveyed in her narrative in terms of her definite view of how horrible her father was during her upbringing, and the unfair burden it placed on her mother, herself and her siblings. Roseanne coped by embracing the role of protector for her mother and siblings, a position she now rightfully credits as a source of her parenting skills. Reading this follow-up interview carefully one can also detect a frightened girl, overwhelmed by the demands and judgments of an alcoholic abusive father, yet Roseanne the adult speaker (and parent) seems firmly in charge. With respect to the 9-point interval scale ratings of reflective functioning, and coherence, Roseanne scored 1-point higher at the level of four compared to baseline scores of 3 on these core indices of attachment security.

Overall, then, Hugo and Roseanne, as observed in the therapy groups, and in the research visits, have achieved some important tentative steps forward. The clinicians treating this pair see the need for much further work needed to build up the strengths this son and mother seem capable of. At the same time, the clinical team sees much ongoing evidence, consistent with the research picture, of Roseanne occasionally feeling deeply fragile. However, the forward moves for this toddler and his mother, especially given the worrying starting point, are notable. The fact that Rosanne has managed to retain custody of her son, speaks volumes for the success of the ongoing intervention. That the group is vitally important to Rosanne and to Hugo was evidenced recently when she reported that now at age 2.5, he asks every morning about going to the group. Rosanne describes how when this happens on a Sunday, he becomes distraught so that she takes him on the 40-min bus ride all the way to the Center to show him that it is locked, that the group will be back the next day.

Ultimately, the aim for the intervention is that each mother may come to see herself as a good enough parent in part by being able to see her child as good enough. That Rosanne can be sensitive to her son's needs, spend time responding to him attentively, resonates with the proposition by Lieberman and Van Horn (2008):

“A good enough mother is able to love a good enough child. She is capable of accepting the mismatches between her fantasies and the reality of the child's individual characteristics, and she stretches herself without crippling resentment to provide the kind of care needed by her particular child” (p. 140).

Discussion

Discussion first addresses the quantitative findings and then moves onto comment on the qualitative findings.

Regarding the high (greater than 50%) rates of security among the toddler–mother attachments, these findings suggest that the attachment-based group intervention for mothers and toddlers is indeed promoting positive changes in the mother-toddler relationships. Given past research with traumatized samples such as the present one, were it not for the intervention it can be assumed that much higher levels of insecurity and disorganization would have been in evidence. The quantitative results suggest that the intervention was making an immediate impact upon the toddler–mother attachment, and was less likely to be changing the mothers' overall state of mind regarding attachment. The latter being the case as more than half the interviews were judged unresolved with respect to past trauma.

Regarding the observation that less trauma in the mothers' background was linked to greater reflective functioning in their Adult Attachment responses, this is a hopeful sign indeed. The finding confirms the prior observation that mentalization or thinking about others' minds and one's own is typically rooted in the experience of support or love from others during childhood (Steele and Steele 2008). These observed links between adversity of childhood experiences in the mothers their current state of mind regarding attachment suggests that the intervention, through fostering a belief in mothers' own worthiness and capabilities of meeting the needs of their toddlers, may lead to increases in reflective functioning and coherence.

Yet, the reported results also urge caution and care with respect to those mothers with the most difficult experiences, where disorganized toddler–mother attachments in the present were in evidence, or unresolved mourning regarding the past was observed, and where the highest levels of parental stress were observed. These preliminary findings confirm past reports (e.g. Moran et al. 2008) that

mothers with disorganized/unresolved AAI responses are less responsive to intervention efforts than mothers with organized AAI profiles. It would seem that the group format, affording support from other mothers in similar circumstances, provides much comfort to these socially isolated and traumatized mothers that individual work is unable to provide.

Overall, the results point to the resources available to the clinician in attachment theory and research (e.g. Ainsworth et al. 1978; Bowlby 1988; Main et al. 1985; Main et al. 2008; Steele et al. 2009), to be relied upon as a source of help in achieving and maintaining effective results with families at risk. Therapeutic processes may be supported, therapeutic actions may be identified, and measurements of outcome may be facilitated. Dramatic changes, especially with families at risk, are not to be expected. But small significant moments of change can be identified via the prudent use of video-film.

The value of video-film as an aid the therapeutic interventions has recently been explored at length with respect to attachment-based interventions aimed at increasing maternal sensitivity (Juffer et al. 2007). In an edited volume, these authors demonstrate that systematic improvements in parent–child relationship quality may be achieved through one-on-one (therapist and mother) sessions guided by the review of video-filmed interactions between mother and infant. The efficacy data for this approach, while impressive, has not yet been extended to group-based work for mothers with a trauma history. Filming interactions that occur in the context of an attachment-based parent–child group intervention, reviewing the films to identify moments of therapeutic action, and playing salient portions back to parents, is likely to have tremendous therapeutic value. This is the case because, if for no other reason, seeing is believing.

In New York City, where the work we have reported here is being undertaken there are 35,000 young children known to Child Welfare Preventive Services. The Attachment-Centered Parent–Child Therapy program described above is currently serving one-tenth of one percent of this population in need. Most of the mothers of infants known to Preventive Services receive, a brief set of parenting classes and anger management training, where there is no concentrated attachment-focus to the work, and little opportunity for mothers to consistently meet with other mothers from similar circumstances. For this reason, we have developed the model for Attachment-Based Parent–Child therapeutic work described in this paper. We are vigorously involved in testing the efficacy of this therapeutic service. It is hoped that by identifying therapeutic action, and demonstrating the effectiveness of this action via research-based measures of outcome, family preservation work will become strengthened and maltreatment of children will, more successfully, be prevented.

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