On The Efficacy of the Group Attachment-Based Intervention (GABI) Aimed at Improving The Toddler-Mother Relationship: Results From a Randomized-Control Trial

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John Bowlby
'The Making and Breaking of Affectional bonds'
1976, p. 154

"How far therapy can and should be taken with any one family or patient is a complex difficult question. The main point perhaps is that a restructuring of a person’s representational models and his re-evaluation of some aspects of human relationships, with a corresponding change in his modes of treating people, are likely to be both slow and patchy. In favourable conditions the ground is worked over first from one angle then from another. At best progress follows a spiral."

The role of Observation:
Links with reflective functioning, parent-infant psychotherapy and training clinicians

John Bowlby, Anna Freud & Rene Spitz each published works outlining their astute observations of distressed children who were at the mercy of an environment devoid of typical parental care (Bowlby, 1944; Freud & Burlingham, 1944; Spitz, 1945).

Bowlby highlights a personality pattern he labeled the “affectionless character”. With astute clinical observation, Bowlby describes how:

"Fourteen of the 44 thieves were distinguished from the remainder by their remarkable lack of affection or warmth of feeling for anyone... In this they differed from the children who had apparently never since infancy shown normal affection to anyone and were, consequently, conspicuously solitary, unemotional and unresponsive. Many of their parents and foster-parents remarked how nothing you said or did to them made any difference. They responded neither to kindness nor to punishment." (Bowlby, 1944, p. 38)

"The technique of writing up these observations could be seen to lay some of the groundwork for later psychoanalytic training and technique in that they require an education in the theory which guides the observer’s attention to notable behaviors, acts showing empathy, frustration, aggression, crying, responsiveness or tasks thereof, carefully noting what is seen and heard, who initiates an action, who responds, and how with what follow-on consequences." (Steele, Murphy & Steele, 2015).
Basic premises of John Bowlby’s attachment theory

- Intimate emotional bonds between individuals have a primary status and biological function
- The way a child is treated has a powerful influence on a child’s development and later personality functioning
- Attachment behavior is to be viewed as part of an organizational system which utilizes ‘internal working model(s)’ of self and other to guide expectation and the planning of behavior
- While attachment behavior is resistant to change, there is a continuing potential for change, which means that at no time of life is a person impermeable to adversity or to favorable influence

“Fright without Solution” (Main, 1995)

Propose that parents who enter altered states of consciousness during discussions of loss/trauma more likely to engage in frightening and/or frightened behavior with a child

Caregiver then becomes the source of comfort and alarm arousing contradictory responses in the infant—flee and approach leading to collapse of a behavioral strategies—mistimed, interrupted and/or incomplete movements.Expressions/behaviors

Attachment Theory and Research: Interest to Clinicians Considerations

Focus on Trauma

Core Methods:
- Strange Situation
- Adult Attachment Interview

Move to the level of representation

Offers an evidence-based methodology

Intergenerational patterns of attachment

THE NEW SCHOOL
Intergenerational Patterns of Attachment: Key to the Enigma of Therapeutic Action: Returns may be greatest from ‘preventive’ early interventions

— transmission—‘the largest number of men and women who have known suffering find renewal and the healing of childhood pain in the experience of bringing a child into the world’ (Fraiberg)
— (but....) Parents repeat aspects of their own childhood experiences in relation to their child as this preserves their particular state of mind with regard to attachment (Main, 2000)

**THE NEW SCHOOL**

CATALYST TO CHANGE: FINDING THE MIDDLE GROUND BETWEEN WITHDRAWAL AND INTRUSIVENESS

-Winnicott—“the infant needs a period of hesitation” in which to rediscover self and object
-Colwyn Trevarthen “good communication involves reticence on the part of the mother” (1977, pg. 343). The need for the therapist to adopt a similar stance to what Trevarthen calls “reticence” is in the service of promoting growth in both the therapeutic and parent child relationship.
-Common therapeutic mis-steps “involves moving too fast to persuade the parent to forego his subjective experience and to adopt the child’s point of view” (Lieberman & van Horn 2008, pp. 248).

**THE NEW SCHOOL**

“TURNING POINT MOMENTS’ AND ‘SOMETHING MORE’

- DANIEL STERN AND THE BOSTON CHANGE PROCESSED STUDY GROUP

“moment” - defined as a notion that captures the subjective experience of a sudden shift in implicit relational knowing for both analyst and patient ... it may include states of activation, affect, feeling, arousal, desire, belief, motive or content of thought, in any combination (Stern, pg. 903)

The discussion of what is the something more comes from many perspectives, where the something more has taken the form of psychological acts versus psychological words; of change in psychological structures versus undoing repression and rendering conscious; of a mutative relationship with the therapist versus mutative information for the patient.
The International Problem: Child Maltreatment

- A 2015 meta-analytic summary of 244 publications and 551 prevalence rates estimated 13%-36% (lower estimate for sexual abuse; higher estimate for emotional neglect)
- Center for Disease Control and Prevention in Atlanta (2016) estimated the total lifetime cost of child abuse and neglect, arising from annual evidence to be $124 billion
- ACEs study (Felitti, Anda et al, 1998) documented the severe psychological, physical and social health effects of child abuse and household dysfunction exposure in the first 18 years of life

The moderating effect of exposure to trauma on treatment effectiveness

- Unresolved loss or trauma impedes responsiveness to therapy in attachment-based interventions (Moran, Pederson & Krupka, 2005), and to therapy informed by social learning theory (Routh, Hill, Steele et al, 1995)
- 'A gloomy picture: A meta-analysis of RCTs reveals disappointing effectiveness of programs aiming at preventing child maltreatment' (Euser, Alink, Bakermans-Kranenburg & van IJzendoorn, 2015)
Group Attachment Based Intervention
GABI

Designed for specific population with high risk
Trauma in the past, trauma in the present, poverty

Unique Program structure:
1) Parent-child group
2) Parent group (+Video Feedback)
3) Child group
Reflective Supervision

Demographic Characteristics of the Population served

- Children: 38% female; 62% male
- Children 3-years and under: 64%
- Caregivers: 61% birth parents; 34% foster/kinship care; 5% adoptive parent
- Education: 37% have no or some high school; only 12% have college degrees
- Poverty, domestic and/or neighborhood violence: 60%
- Ethnicity:
  - Hispanic/Latino: 63%
  - African/American: 28%
  - White: 3%, Other: 6%

Adverse Childhood Experiences Rarely Occur in Isolation...

They come in groups.

Given an exposure to one category, there is 80% likelihood of exposure to another.

As the number of ACE increases the number of co-occurring or “co-morbid” conditions increases.
**ACEs Study**

Strong, graded relationship between ACEs Score and:

- smoking
- chronic obstructive pulmonary disease (COPD)
- alcohol abuse and alcoholism
- IV drug use
- ischemic heart disease (IHD)
- obesity
- diabetes
- liver disease
- poor health-related quality of life
- risk for intimate partner violence
- multiple sexual partners
- sexually transmitted diseases (STDs)
- depression
- suicide attempts
- unintended pregnancies
- fetal death

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**Frequencies of Adverse Childhood Experiences (ACEs) in 0-18 yrs reported by Calif. Middle Class sample (N=17,000) and Bronx ACS sample (N=42)**

<table>
<thead>
<tr>
<th>Abuse categories</th>
<th>Calif sample</th>
<th>Bronx sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional (by parents)</td>
<td>11%</td>
<td>86%</td>
</tr>
<tr>
<td>Physical (by parents)</td>
<td>28%</td>
<td>76%</td>
</tr>
<tr>
<td>Sexual (by anyone)</td>
<td>21%</td>
<td>74%</td>
</tr>
<tr>
<td>Emotional neglect</td>
<td>15%</td>
<td>76%</td>
</tr>
<tr>
<td>Physical neglect</td>
<td>10%</td>
<td>71%</td>
</tr>
</tbody>
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**Frequencies of Adverse Childhood Experiences (ACEs) in 0-18 yrs reported by Calif. Middle Class sample (N=17,000) and Bronx ACS sample (N=42)**

<table>
<thead>
<tr>
<th>Household dysfunction</th>
<th>Calif sample</th>
<th>Bronx sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance abuse (by parents)</td>
<td>27%</td>
<td>32%</td>
</tr>
<tr>
<td>Mental illness of parent(s)</td>
<td>29%</td>
<td>44%</td>
</tr>
<tr>
<td>Raised by One or NO parent</td>
<td>23%</td>
<td>32%</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>13%</td>
<td>32%</td>
</tr>
<tr>
<td>Incarcerated parent</td>
<td>5%</td>
<td>45%</td>
</tr>
</tbody>
</table>
Murphy, A., Steele, M....Steele H. (2014) Adverse Childhood Experiences (ACEs) questionnaire.....Implications for parent child relationships, Child Abuse & Neglect, 38, 224-233.

Four or more ACEs reported by:

<table>
<thead>
<tr>
<th>California middle class sample</th>
<th>Bronx ACS sample (GABI pilot sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6%</td>
<td>74%</td>
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Four or more ACEs are 12 times more common in Bronx.

REARING: The Conceptual Framework of GABI

REARING is a useful way to remember the focus of GABI, which is based on the following:

- Reflective Functioning
- Emotional Mirroring
- Affect Regulation
- Resilience in therapeutic and parental relationships
- Intergenerational Patterns
- Nurturing the parent and child and enhancing parent’s nurturing of their children
- Group context

Alger and Hogan (1967, pg. 1)

“It may be no exaggeration to say that videotape recording represents a technological breakthrough with the kind of significance for psychiatry that the microscope has had for biology.”
Dopamine related neural pleasure center in human brains are stimulated when someone acts generously or responds to a generous act.
The use of video as catalyst to therapeutic action

- Multi-modal display of affect
- Video images of parent-child interaction shown to parent
- Facilitates therapeutic alliance
- Promotes integration of affect laden images into verbalization of affect
- Demands a mentalizing stance
- Change is not behavior alone, but representational level

Design of RCT, and initial results

- Random assignment of 70 families, and follow them from baseline, through end of treatment and six-month follow-up, 35 GABI and 35 STEP families
- Analysis conducted on 43 families in GABI, and 35 families in STEP, who have completed baseline (T1) and end of treatment (T2)
- Results re our a priori primary aims of
  - (a) preventing child maltreatment
  - (b) reducing parental stress; and
  - (c) improving the quality of the parent-child relationship

(Steele, Murphy, Bonuck, Meisner & Steele, in press) Developmental Psychopathology, RCT Report on the Effectiveness of Group Attachment-Based Intervention (GABI©): Improvements in the parent-child relationship not seen in the control group

Parent report of Child’s exposure to Adverse Childhood Experiences (ACEs) at baseline (T1) and end of treatment (T2) for GABI and STEP treatment groups

- No significant increase in either group
- Note: mothers' mean exposure to ACEs in both groups is >5

Most common ACEs for children are (1) living with a parent with a mental health problem; (2) separation/divorce of parents
Maternal reports of STRESSORS at baseline (T1) and end of treatment (T2) for GABI and STEP treatment groups

- Significant decline for GABI treatment group (d=.43, p<.01, n=43)
- Trend downward for STEP treatment group (d=.34, p <.10, n=35)

<table>
<thead>
<tr>
<th>GABI</th>
<th>STEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.8</td>
<td>6.5</td>
</tr>
<tr>
<td>9.3</td>
<td>12.5</td>
</tr>
</tbody>
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**Coding Interactive Behavior**
(Feldman, 1998)

- Mother and child invited to be together in a room or space with age-relevant toys for a 10-minute observation
- First 5 minutes of film is scored on 43 discrete 5-point scales (1-5) covering maternal, child, and interactive or dyadic behavior
- We relied on 29 discrete CIB scales to reduce the data to four internally consistent CIB aggregate scores

CIB aggregate score for **MATERNAL SENSITIVITY**
based on 12 reliable rated discrete scales

- Acknowledging
- Imitating
- Elaborating
- Gaze
- Positive affect
- Vocal appropriateness
- Appropriate range of affect
- Resourcefulness
- Praising
- Affectionate
- Enthusiasm
- Supportive presence

--- alpha at baseline = .88
--- end-of-treatment = .80
MATTERNAL SENSITIVITY AT BASELINE (T1) AND AT END OF TREATMENT (T2) SHOWN FOR GABI AND STEP TREATMENT GROUPS

- INCREASE for GABI, p = .03
  - d (effect size) = .33
- DECLINE for STEP, p = .02
  - d (effect size) = .41

CIB aggregate score for MATERNAL INTRUSIVENESS based on 4 reliably rated discrete scales

- Forcing
- Over-riding
- Negative affect
- Hostility

alpha at baseline = .72
at end-of-treatment = .75

Steele, Murphy, Bonuck, Meisner & Steele, in press) Developmental Psychopathology, RCT Report on the Effectiveness of Group Attachment-Based Intervention (GABI©): Improvements in the parent-child relationship not seen in the control group.

MATTERNAL INTRUSIVENESS AT BASELINE (T1) AND AT END OF TREATMENT (T2) SHOWN FOR GABI AND STEP TREATMENT GROUPS

- Decline for GABI, p = .11, NS
  - d (effect size) = .22
- Increase for STEP, p = .27

Steele, Murphy, Bonuck, Meisner & Steele, in press) Developmental Psychopathology, RCT Report on the Effectiveness of Group Attachment-Based Intervention (GABI©): Improvements in the parent-child relationship not seen in the control group.
CIB aggregate score for **CHILD ENGAGEMENT** based on 10 reliably rated discrete scales

- Gaze
- Alertness
- Positive affect
- Vocalization
- Initiation
- Compliance to parent
- Persistence
- Competence
- Capacity for symbolic play

--- alpha at baseline = .80, and at end-of-treatment = .79

--- Steele, Murphy, Bonuck, Meisner & Steele, in press) Developmental Psychopathology, RCT Report on the Effectiveness of Group Attachment-Based Intervention (GABI©): Improvements in the parent-child relationship not seen in the control group

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**CHILD ENGAGEMENT AT BASELINE (T1) AND AT END OF TREATMENT (T2) SHOWN FOR GABI AND STEP TREATMENT GROUPS**

- \( P = .000 \)
- \( d \) (effect size) = .82

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**OVERALL POSITIVE QUALITY TO DYADIC BEHAVIOR** based on three reliably rated discrete scales

- Reciprocity
- Adaptation-Regulation
- Fluency

alpha at baseline = .95
at end-of-treatment = .93

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--- Steele, Murphy, Bonuck, Meisner & Steele, in press) Developmental Psychopathology, RCT Report on the Effectiveness of Group Attachment-Based Intervention (GABI©): Improvements in the parent-child relationship not seen in the control group

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OVERALL POSITIVE QUALITY TO DYADIC INTERACTION AT BASELINE (T1) AND AT END OF TREATMENT (T2) SHOWN FOR GABI AND STEP TREATMENT GROUPS

- P = .000
- d (effect size) = .59

Bowlby, 1951, p. 84
On Parenting

Just as children are absolutely dependent on their parents for sustenance, in all but the most primitive communities, are parents, especially mothers, dependent on a greater society for economic provision. If a community values its children it must cherish their parents.