Promoting resiliency in maltreating parents and their children through attachment-based interventions

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Academic trajectory

• Ph. D
  – Université du Québec à Montréal
  – Promoter: Dr. Ellen Moss
  – Thesis: the role of Mother-child conversation
    • in the transmission of attachment at preschool age
    • and in children’s social adaptation through the preschool and school age period.

  – Clinical research
    • Attachment-based Intervention for maltreating parents reported to the Centre-Jeunesse de Lanaudière
• Postdoctorate
  – Leiden University, The Netherlands
  – Prof. Dr. M. van IJzendoorn, Dr. M. Bakermans-Kranenburg and Dr. F. Juffer
  – Attachment of high-risk children
    • Maltreated children, institutionalized children (Ukraine)
    • Anomalous or Frightening parental behaviors
    • Attachment-based intervention and clinical research designs
Attachment

• Attachment behavior
  – behavior that a child manifests to seek proximity in times of stress
  – serves a biological function because it increases the likelihood of protection and survival and decreases distress and arousal

• Attachment behavioral system
  – A set of behaviors (crying, seeking contact) with a common goal: protection
  – organized as a function of the caregiving environment

Bowlby, 1982
Individual differences

• When seeking comfort and reassurance
  – toward a responsive and sensitive caregiver
    • infants learn they can rely on their caregiver for protection
  – And once reassured
    • infants can explore their environment freely, and eventually become confident in their own interactions with others

Ainsworth et al., 1978
Proximité - Exploration

Protection - Proximité

Peur
Faim
Anxiété

Autonomie - Distance

Calme
Curiosité
Proximity

Protection

Peur
Faim
Anxiété

Exploration

Autonomie - Distance

Calme
Curiosité
Proximité

Protection - Proximité

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Autonomie - Distance

Calme
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Exploration
Proximity  -----  Exploration

Protection - Proximité
Peur
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Autonomie - Distance
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Proximity

Protection - Proximité

Peur
Faim
Anxiété

Exploration

Autonomie - Distance

Calme
Curiosité
Proximité  ------  Exploration

Protection - Proximité

Peur
Faim
Anxiété

Autonomie - Distance

Calme
Curiosité
Proximité

Protection - Proximité

Peur
Faim
Anxiété

Exploration

Distanciation - Distance

Calme
Curiosité
Proximity  ------  Exploration

Protection - Proximité
Peur
Faim
Anxiété

Autonomie - Distance
Calme
Curiosité
Attachment patterns

**Parent’s behavior**
- Sensitivity
- Rejection
- Inconsistency
- Frightening/Frightened

**Child attachment strategy**
- Secure
- Insecure-avoidant
- Insecure-ambivalent
- Insecure-disorganized
Attachment disorganization

• Lack a coherent strategy to access the attachment figure in times of stress
  – Sequential display of contradictory behavior: strong attachment behavior followed by avoidance
  – Dazed or freezing behavior
  – Direct indices of apprehension toward the parent: Fearful facial expression

Main & Solomon, 1990
Disorganization

- example
Predictors of disorganization

• Trauma
  – Parents with unresolved trauma: Loss, abuse

• Stressful life events
  – Hospitalization of a parent
  – Parent experiences loss of a significant other

• Cumulative environmental risk factors

Main et al., 1985
Moss, Cyr, et al., 2005
Cyr, van IJzendoorn, et al., in preparation
• Frightening/Frightened behavior
  – Frightening: Aggressive, hostile, animal-like attack behavior
  – Frightened: Dissociated, trance-like behavior, highly withdrawn, deferential, haunted voice

– Extreme insensitivity: Maltreatment
  • 45% to 80% of maltreated children show disorganized attachment behavior

Van IJzendoorn, et al., 1999 Madigan et al., 2006
Disorganization

• Fright without solution
  – Source of protection = Source of fright

• Possible responses
  – Flight, freeze or fight

Main & Hesse, 1992
Frightening/Frightened behavior

• example
Disorganization beyond infancy

• Controlling attachment
  – Controlling-punitive
    • Children use hostile and directive behavior with the caregiver that may include harsh commands, verbal threats, and physical aggression.
  – Controlling-caregiver
    • Children structure the caregiver’s interaction by being excessively cheery, polite, or helpful toward the caregiver.

Main & Cassidy, 1988
Moss, Cyr, Dubois-Comtois, 2004
Attachment and later development

Security
• Emotional regulation
• Metacognitive skills
• Self-esteem
• Mastery motivation
• Prosocial behavior

Disorganization
• Behavior problems (Clinical levels)
• Metacognitive deficits
  – less planning abilities
• Poor school performance
  – More school failure
• Psychopathology
  – Depression, anxiety, dissociation, suicidal thoughts and behaviors

Moss, Cyr, & Dubois-Comtois, 2005
Lyons-Ruth & Jacobvitz, 1999
Maltreatment
The Ecological-Transactional Model

- Parent-child relationship
- Family environment
- Social networks: community
- Cultural values and beliefs

Cicchetti & Lynch, 1993
Devastating consequences of maltreatment

• Neurobiological development compromise
  – Dysregulated stress responses (cortisol level)
  – Growth deficits
  – Adverse brain development (e.g. atrophy of the hippocampus, smaller brain volume, etc)

• Behavior problems and high levels of psychopathology
  – depression, anxiety, PTSD, suicidal ideas, dissociation
  – Aggressive behaviors, delinquency, substance abuse

• Cognitive deficits
  – Poor academic performance
  – Poor executive functioning and memory
  – Hostile attributions
Resiliency in maltreated children

Risk factors
vulnerabilities

Protective factors
buffers
In this perspective...

- An intervention program that would focus only:
  - On reducing the caregiver’s maltreating behavior
  - Distal factors (e.g. social support, etc)
  - Representations of parent (e.g. individual therapy)

- Without considering dysfunctional models of parent-child interaction to promote attachment security

- is less likely to enhance adequate parenting practices and promote development of maltreated children.
Attachment-based interventions

• Effective to enhance
  – Maternal sensitivity
  – Child attachment security

• The most effective attachment-based interventions
  – Parent-child oriented, short-term and behaviorally focused,
  – as opposed to interventions oriented toward changing maternal representations and/or providing social support.

Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003
Proposed Intervention strategy

Environment and Parent

Ecological environment, Family characteristics, and Parental psychological resources

Parent-child relationship

Maltreatment

Child Attachment

Child emotional, social, and cognitive outcomes

Intervention Target

Parental sensitive behavior
The intervention program

• Intervention
  – 8 home visits
  – 90 minutes once a week

• Enhancing maternal sensitive behavior

• HOW:
  – Reinforce maternal sensitive behavior via video feedback
  – Show mothers how to recognize their child attachment signals via video feedback
  – Promote mother and child positive *physical contact*
  – Promote mother and child positive and reciprocal interactions
Overview of an intervention session

2. Short discussion with mother on attachment-related themes (e.g. emotion regulation)

4. 10 min. filmed mother-child interaction

6. Immediate video feedback:
   – Mother is asked:
     ▪ How she felt during the activity?
     ▪ What behaviors did she observed (her own and the child’s)
     ▪ Reinforcement

7. At the end of the visit:
   – Mother is asked to engage in a 10 min. parent-child activity during the week (between the 2 visits)
Method

• Participants: 84
  – Parents reported to the Child Protection Services of Quebec for child abuse or neglect (and some from CLSC)
  – Children age: between 0 and 5 years

• Randomized controlled trial
  – Control group ($n = 41$): Usual Child Protection Services intervention
  – Intervention group ($n = 43$): Promotion of maternal sensitivity via video feedback

• Pre-test and Post-test assessments
Pre-test: 3 visits

**MOTHER**
- Sensitivity
- Attachment (AAI)
- Childhood trauma
- Psychol. symptoms (SCL)
- Stress (PSI)
- Marital conflicts (CTS)
- Stressful life events
- Social support

**CHILD**
- Development / IQ
- Attachment
- Emotion regulation

**Parent-child interaction**

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**Intervention group**
8 home visits

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**Control group**
8 weeks later: Post-test

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Post-test: 2 visits

Same as pre-test, with the exception of the AAI

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**OR**
### Child and family characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>% / (M(SD))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child gender</td>
<td>58% boys</td>
</tr>
<tr>
<td>Child age</td>
<td>35.43 (19.33)</td>
</tr>
<tr>
<td>Mothers’ age (29% adolescent mothers)</td>
<td>27.67 (7.48)</td>
</tr>
<tr>
<td>Maternal education</td>
<td>10.04 (2.42)</td>
</tr>
<tr>
<td>Single mother-headed family</td>
<td>50%</td>
</tr>
<tr>
<td>Family income &lt; 25 000$</td>
<td>70%</td>
</tr>
<tr>
<td>Prenatal smoking exposure</td>
<td>59%</td>
</tr>
<tr>
<td>Prenatal drug/medic./alcohol exposure</td>
<td>31%</td>
</tr>
<tr>
<td>Child premature birth (before 38 weeks)</td>
<td>26%</td>
</tr>
</tbody>
</table>

*Descriptive data: Pre-test \(n = 84\)*
<table>
<thead>
<tr>
<th>Child and Family characteristics</th>
<th>% / M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent trauma experiences</td>
<td></td>
</tr>
<tr>
<td>Loss of attachment figure</td>
<td>20%</td>
</tr>
<tr>
<td>Lived in foster family or youth centre</td>
<td>37%</td>
</tr>
<tr>
<td>History of maltreatment</td>
<td>51%</td>
</tr>
<tr>
<td>Adult attachment (Unresolved attachment)</td>
<td>36%</td>
</tr>
<tr>
<td>Parental sensitivity</td>
<td>.26 (.46)</td>
</tr>
<tr>
<td>Clinical scores for:</td>
<td></td>
</tr>
<tr>
<td>Parental stress</td>
<td>49%</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>20%</td>
</tr>
<tr>
<td>Psychiatric symptoms</td>
<td>27%</td>
</tr>
<tr>
<td>Social support satisfaction</td>
<td>within normal range</td>
</tr>
<tr>
<td>Child and Family characteristics</td>
<td>% / M(SD)</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Child maltreatment</td>
<td></td>
</tr>
<tr>
<td>Child Neglect</td>
<td>51%</td>
</tr>
<tr>
<td>Child physical and/or sexual abuse</td>
<td>22%</td>
</tr>
<tr>
<td>Lived in foster family</td>
<td>22%</td>
</tr>
<tr>
<td>Clinical scores for:</td>
<td></td>
</tr>
<tr>
<td>Child externalizing behavior problems</td>
<td>29%</td>
</tr>
<tr>
<td>Child internalizing behavior problems</td>
<td>24%</td>
</tr>
<tr>
<td>Developmental delay (&lt; 30 months)</td>
<td></td>
</tr>
<tr>
<td>Motor</td>
<td>47%</td>
</tr>
<tr>
<td>Mental</td>
<td>39%</td>
</tr>
<tr>
<td>I.Q. scores below average (&gt; 30 months)</td>
<td>46%</td>
</tr>
</tbody>
</table>
Results

• At Pre-test
  – No Group differences at pre-test
    • Except for social support and maternal history of maltreatment
  – Low sensitivity is associated with:
    • Child externalizing and internalizing behavior problems
    • Child motor and mental development, and IQ scores
    • Maternal psychosocial risk
Post-test: Treatment effects

Maternal sensitivity

*Controlling for maternal sensitivity at pre-test
Post-test: Treatment effects

Parental Stress

*Controlling for maternal sensitivity at pre-test
Post-test: Treatment effects

IQ, Mental and Motor Development

*Controlling for IQ, Mental or Motor development at pre-test
Post-test: Treatment effects

Behavior problems

*Controlling for externalizing or internalizing behavior problems at pre-test
Children’s trajectory of behavior problem as a function of socioeconomic risk and intervention groups
Children’s trajectory of behavior problem as a function of psychosocial risk and intervention groups
Conclusion

• The intervention program is
  – effective to:
    • Enhance maternal sensitivity
    • Enhance children’s motor development
    • Decrease children’s behavior problems for families at lower socioeconomic risk but higher social risk
  – Not effective to reduce parental stress
Implications...

• To help children
  – Focus on the relationship
    • It is critical to help both the parent and the child
    • This study supports the view that providing social support or individual therapy would not be sufficient to help children.

• To help parent
  – Is enhancing parental sensitivity enough to change parental life functioning?
    • To increase family income?
    • To enhance level of education? (going back to school)
    • To reduce stress?
Implications...

• Child social services
  – To protect children: Conduct comprehensive evaluations of child development
    • Best indicator of children’s overall functioning
    • Only assessing parenting practices is not sufficient

• Future research
  – Do follow up tests
    • Are treatment gains maintained over time?
  – Examine with more precision the role of risk in treatment for both mother and child
Future intervention programs

FOCUS

3. Promoting children’s development
4. Parents life functioning
Future intervention programs

**HOW:**

1. Parental caregiving behavior (e.g. maternal sensitivity, responsiveness, etc.)

3. Ecological environment (e.g. social support, marital conflict, income level, etc.)

5. Child’s own input in his or her development (e.g. child’s age, temperament, cognitive abilities, etc.)