Can Caregiving Behavior of Maltreating Mothers be Changed?

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In collaboration with Lanaudière Child Welfare Services

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Maltreated and neglected children are a vulnerable population:

- **Cumulative risk factors**
  - Parental psychiatric problems and drug abuse
  - Rupture of attachment relationships
  - Child behavior problems
  - Cognitive delay

- **In the long-term...**
  - Problems with justice
  - School failure
Attachment is a important predictor of both socio-affective and cognitive outcomes

Large majority of maltreating parents with Insecure or Unresolved attachment models

Large majority of maltreated children with insecure or disorganized attachment patterns
Helping parents through social support or individual psychotherapy does not necessarily help their children.

Direct intervention with the parent-child dyad is the most effective way to change child outcomes and relationship quality.

Short or Long-term Intervention?
Method

- Participants: 80
  - 66% reported to Child Welfare Services of Quebec for child abuse or neglect
  - 34% referred from community services with multiple risk factors (e.g. poverty, adolescent mothers, no social support, spousal violence)
  - Child age: Range = 0 to 5 years, mean = 3 yrs.
  - Parent age: Range = 15 to 49 years, mean = 28 years
  - 59% boys
Method

• Randomized controlled trial
  – Control group \((n = 40)\) : Monitoring by Child Welfare Services, average visit by social worker once a month.
  – Intervention group \((n = 40)\) : 8 week home-based intervention

• Pre-test and Post-test assessments
Study design

PRE-TEST (3 visits)
- **Mother**
  - Adult Attachment (AAI)
  - Stress
  - Couple relations
  - Stressful life events
  - Traumatic experiences
  - Psychiatric symptoms
  - Social support
  - Sensitivity (Q-sort)
- **Child**
  - Motor and men.dev.
  - Attachment
  - Behavior problems
  - Emotional regulation

INTERVENTION GROUP
(8 home visits)

OR

CONTROL GROUP
(Agency monitoring)

POST-TEST (2 visits)
- Same measures as pre-test (no AAI)
Components of the intervention program with maltreated children
Content of home-based intervention sessions (8 weeks)

1. Discussion with parent on themes related to parent-child relations (what happened that week).

2. Filmed sequence of parent-child play (choose a pleasurable activity).

3. Video feedback
Videofeedback is an effective teaching tool: it allows the parent to witness her own behavior.

Videofeedback provides:
1. Immediate feedback
2. An opportunity to change
3. Positive reinforcement
Film parent-child play interaction (10 minutes)

- **Watch video with parent:**
  - What did the parent feel during the activity?
  - What did the parent observe about the child?
  - What did she feel or observe about herself?

- **Reinforce sensitive behavior**
- **Note inappropriate behavior**
Some examples of themes dealt with during intervention sessions
Linking parental preoccupations with parental sensitivity:
Help parent develop alternative responses to boost child confidence. Link parent's own history and present situation with caregiving pattern.
Linking parental preoccupations with parental sensitivity:
Help parent develop alternative responses to boost child confidence.
Link parent's own history and present situation with caregiving pattern.

Re-establish balanced structure in the dyad:
Help parent to:
1) allow the child to take the lead
2) reassume parental control
3) practice reciprocity, turn-taking
Some examples of themes

Follow the child's lead:
Let children explore safely! With older children, use appropriate discipline, contain aggression, promote positive behavior.
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Let children explore safely! With older children, use appropriate discipline, contain aggression, promote positive behavior

Importance of touch:
Encourage positive physical contact for brain development and emotional regulation
Child emotion:

Emotion regulation:
Importance of allowing open emotional open expression

Promoting emotional competence: Teaching the dyad to use words to communicate distress (anger, sadness, fear).
Sample Descriptives

SES and family status risk:

Family income: 51% < 15,000$
69% < 25,000$

Parent education: 65% no high school diploma

Single-parent family: 50%

Child born to an adolescent mom: 29%
<table>
<thead>
<tr>
<th>Sample Descriptives</th>
</tr>
</thead>
</table>

**Child biological risk:**

| Prenatal consumption: | 58% tobacco  |
|                      | 27% alcohol  |
|                      | 32% drugs    |

| Postnatal characteristics: | 55% problems during labour (cesarian, induced labor, forceps) |
|                          | 25% children with medical problems (oxygen deprivation, convulsions, incubator) |

**Weigh at birth:**

| 6,74 lbs average |
| (27% premature) |
## Maternal Pre-test Scores

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental stress</td>
<td>87.89 (clinical score = 90)</td>
</tr>
<tr>
<td>Psychiatric symptoms</td>
<td>60.24 (clinical score = 63)</td>
</tr>
<tr>
<td>Severe spousal physical violence</td>
<td>25% (threatened or attacked with weapon, burns, strangling)</td>
</tr>
<tr>
<td>Maternal Trauma history</td>
<td></td>
</tr>
<tr>
<td>Abuse or neglect</td>
<td>51%</td>
</tr>
<tr>
<td>Death of a parent</td>
<td>20%</td>
</tr>
<tr>
<td>Foster or Centre Care</td>
<td>39%</td>
</tr>
<tr>
<td>Maternal Sensitivity (MBQ)</td>
<td>.24 (-.82 to .85)</td>
</tr>
<tr>
<td>Child Pre-test Scores</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Externalizing problems: 60.40 (clinical score = 63) (&gt; 18 months)</td>
<td></td>
</tr>
<tr>
<td>Internalizing problems: 55.71 (clinical score = 63) (&gt; 18 months)</td>
<td></td>
</tr>
<tr>
<td>IQ (&gt; 30 months): 90.44 (60 to 116)</td>
<td></td>
</tr>
<tr>
<td>Bayley mental development: 88.36 (50 to 117) (&lt; 30 months)</td>
<td></td>
</tr>
<tr>
<td>Bayley motor development: 88.74 (50 to 115) (&lt; 30 months)</td>
<td></td>
</tr>
<tr>
<td>Bayley emotion regulation: 60.72 (1 to 99) (&lt; 30 months)</td>
<td></td>
</tr>
<tr>
<td>Attachment (str. sit): 19% B; 14% A; 18% C; 49% D</td>
<td></td>
</tr>
</tbody>
</table>
## Pretest measures: control vs. intervention group

<table>
<thead>
<tr>
<th>Child variables</th>
<th>Intervention $M (SD)$</th>
<th>Control $M (SD)$</th>
<th>$t$-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Externalizing problems</td>
<td>61.00 (10.43)</td>
<td>59.81 (12.13)</td>
<td>.41</td>
</tr>
<tr>
<td>Internalizing problems</td>
<td>57.65 (7.79)</td>
<td>53.77 (12.69)</td>
<td>1.45</td>
</tr>
<tr>
<td>IQ (&gt;30 months)</td>
<td>92.74 (14.86)</td>
<td>88.65 (14.37)</td>
<td>.94</td>
</tr>
<tr>
<td>Mental dev. (&lt;30 months)</td>
<td>88.24 (10.83)</td>
<td>88.50 (16.45)</td>
<td>-.06</td>
</tr>
<tr>
<td>Motor dev. (&lt;30 months)</td>
<td>86.17 (10.48)</td>
<td>91.63 (17.60)</td>
<td>-1.11</td>
</tr>
<tr>
<td>Emotion reg (&lt;30 months)</td>
<td>60.33 (35.74)</td>
<td>61.14 (26.96)</td>
<td>-.07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parent variables</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Sensitivity</td>
<td>.25 (.46)</td>
<td>.24 (.47)</td>
<td>.15</td>
</tr>
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### Pretest measures: control vs. intervention group

#### Child attachment at pre-test

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<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
</tr>
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<tbody>
<tr>
<td>Secure</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Insecure</td>
<td>24</td>
<td>22</td>
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</table>

- **Att. security**: $p = .587$

- **Att. disorganization**: $p = .602$

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<tr>
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<tbody>
<tr>
<td>Organized</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Disorganized</td>
<td>14</td>
<td>13</td>
</tr>
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</table>
Overall increase in parental sensitivity for intervention group

Maternal sensitivity

*Controlling for maternal sensitivity at pre-test

ANCOVA

$F(1,81)=5.36, p < .05$
Increase in attachment security for intervention group

Child attachment at post-test

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Insecure</td>
<td>13</td>
<td>19</td>
</tr>
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Fisher’s Exact Test

Att. security: $p = .048$

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<tbody>
<tr>
<td>Organized</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Disorganized</td>
<td>8</td>
<td>14</td>
</tr>
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</table>

Att. disorganization: $p = .056$

*No significant differences at pre-test
Increase in motor development for intervention group

![IQ, Mental and Motor Development](chart)

**ANCOVA**

- Mental: $F(1,30)=.20$, n.s.
- Motor: $F(1,30)=6.50$, $p < .05$
- I.Q: $F(1,40)=.05$, n.s.

*Controlling for IQ, Mental or Motor development at pre-test*
Greater decrease in behavior problems for children with lower SES risk

**Externalizing problems**

<table>
<thead>
<tr>
<th>Ext. Behaviors</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
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<tbody>
<tr>
<td>Intervention group</td>
<td>Low risk</td>
<td>High risk</td>
</tr>
<tr>
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<td>High risk</td>
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**Internalizing problems**

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<td>High risk</td>
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</table>
Factors composing the SES risk index

**Lower SES in the Intervention group (1 factor or less)**

- Family income under $25,000: 11%
- Single parent status: 22%
- Adolescent mothers: 0%
- No high-school diploma: 22%

**Higher SES in the Intervention group (2 factors or more)**

- Family income under $25,000: 93%
- Single parent status: 65%
- Adolescent mothers: 26%
- No high-school diploma: 84%
Conclusions: Effectiveness of program

• Overall increase in parental sensitivity for intervention group

• Overall improvement in motor development scores

• Overall improvement in attachment security for intervention group and marginal improvement in attachment organization
Conclusions: Effectiveness of program

- **Reduction in behavior problems** for children of parents at lower socio-demographic risk. Intervention children of mothers with less than high school diploma did not reduce behavior problems.

- **No change in maternal stress levels.**

- **Biological risk of child** did not moderate effects on motor development, behavior problems and attachment.
Case study

- Boy aged 2.5
- Mother aged 26
- Child Welfare Sample
- Video segments intervention sessions 1, 5 and 7.
Case study

Pre-intervention dyadic Interaction Profile:

- Mother intrusive
- Mother invalidates child ideas and efforts
- Parallel play
- Low child persistence and exploration
- Mixed affect (inappropriate negative comments)
After intervention:

- Improvement in maternal sensitivity
- Responds to child distress
- Adjusts to child pace
- Supports child exploration
- Shared pleasure in activities
- Gives child positive feedback
Case study

Mom's post-intervention statement

“I learned to be a mother and to feel good about being a mom. I am more aware of my child's needs. I have more confidence in myself and in him also. I love to play with him.”