Trajectories of PTSD Symptoms across the Transition to Parenthood among Women Reporting Childhood Maltreatment: Protective Factors and Parenting Outcomes Associated with Resilience

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Child Maltreatment and PTSD

- Approximately 20% of individuals are maltreated as a child (Finkelhor et al., 2009)
  - Emotional or psychological abuse
  - Physical abuse
  - Neglect
  - Sexual abuse

- Rates of child maltreatment are just as high or higher in samples of pregnant women (Bert et al., 2009; Lang et al., 2005: Seng et al., 2011)

- A history of childhood maltreatment is associated with a significantly increased likelihood of meeting criteria for PTSD during adulthood, as well as higher levels of PTSD following later traumatic events, such as intimate partner violence (IPV) during adulthood (Silverman et al., 1996; Wilson et al., 2012)
Child Maltreatment and Parenting

During the early postpartum years, a history of childhood maltreatment has been found to be associated with a number of problematic parenting behaviors:

- Unrealistic expectations
- Less responsiveness, empathy, sensitivity
- Negative perceptions/attribution of the child and relationship
- Intrusiveness
- Greater use of spanking and valuing corporal punishment
- Increased child abuse potential
- Perpetrating child maltreatment
PTSD and Parenting

PTSD symptoms resulting from childhood maltreatment can be activated by various experiences of becoming a parent (Schechter et al., 2004)

PTSD symptoms are associated with more problematic parenting:
- Impulsive in interactions with children
- Underestimate child’s distress and less likely to seek services for the child
- Difficulties bonding
- Negative perceptions/attributions of the child and relationship
- Withdrawal or use of avoidant behaviors in interactions with the child
- Distorted (e.g., hostile, role-reversed, incoherent, inconsistent) mental representations of the child
Resilience in Parenting

Resilience:
- “the capacity of a dynamic system to withstand or recover from significant threats to its stability, viability or development” (Masten, 2011)

Indicators of resilience vary by study.

Resilient Mothers
The Present Study
Present Study Aims

- Focus on psychological functioning (low PTSD symptoms) as an indicator of resilience in mothers who have experienced physical and/or sexual childhood maltreatment.

- Identify relational variables that support maternal resilience during the first 2 years after birth.
  - Relational variables are amenable to intervention

- Identify parenting variables at 2 years after birth that are associated with maternal resilience.
  - This is a vulnerable time for parents who are maltreatment survivors.
The Parenting Project

Time 1: Pregnancy
- Home interview
  - n = 114
  - Infant attachment
  - Maternal sensitivity
  - Mother-infant free play
  - Questionnaires
  - Parenting
  - Current IPV
  - Current relationships
  - Mental health symptoms

Time 2: 3-months postpartum
- Phone interview
  - n = 120
  - Maternal representations of the child
  - Questionnaires
    - Trauma history
    - Mental health symptoms
    - Early and current relationships

Time 3: Age 1
- Home interview
  - n = 114
  - Infant attachment
  - Maternal sensitivity
  - Mother-infant free play
  - Questionnaires
    - Parenting
    - Current IPV
    - Current relationships
    - Mental health symptoms

Time 4: Age 2
- Home interview
  - n = 99
  - Maternal representations of the child
  - Infant attachment
  - Maternal sensitivity
  - Mother-infant free play
  - Questionnaires
  - Parenting
  - Current IPV
  - Current relationships
  - Mental health symptoms

Time 5: Age 2.5-3
- Home interview
  - n = 82
  - Maternal sensitivity
  - Adult attachment
  - Mother-infant free play
  - Child language
  - Questionnaires
    - Current IPV
    - Mental health symptoms

- Phone interview
  - n = 119
  - Mother and infant health and wellbeing

- Home interview
  - n = 119
  - Maternal representations of the child
  - Questionnaires
  - Parenting
  - Current IPV
  - Current relationships
  - Mental health symptoms
Participants

- 120 primarily low-income women
- Average mothers’ age = 26.2 (Range = 18-42, SD = 5.7)
- Marital status:
  - 63% single (never married)
  - 28% married
  - 4% separated
  - 5% divorced
- 30% were pregnant for the first time
- Median monthly family income = $1,500 (range = $0 - $10,416)
- Social services received:
  - 73% WIC
  - 52% food stamps
  - 76% Medicaid, Mi-Child, or Medicare
  - 17% public supplemental income
Trauma Measures

- History of physical and/or sexual maltreatment during childhood
  - Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998)
  - Assessed at pregnancy
  - $n = 78$

- PTSD symptoms
  - PTSD Checklist – Civilian (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993)
  - Assessed at pregnancy, as well as 1 and 2 years after birth.
Relational Measures

- **Romantic Relationship Quality**
  - Braiker and Kelley’s (1979) intimate relations questionnaire

- **Family Social Support**
  - Subscale of the Perceived Social Support Scale (Procidano & Heller, 1983)

- **Intimate Partner Violence**
  - Conflict Tactics Scale – 2 (CTS-2; Straus, Hamby, & Warren, 2003)

- All relational variables were assessed at pregnancy, as well as at 1 and 2 years after birth.

- Composites were created by averaging across time points
Parenting Measures

- **Parenting Stress**
  - Parenting Stress Index-Short Form (PSI-SF: Abidin, 1995)

- **Parenting Hassles**
  - Parenting Daily Hassles Scale (PDH: Crnic & Greenberg, 1990)
  - Only used intensity total scores (not frequency)

- Assessed 2 years after birth.
Results
Latent Class Growth Analysis (LCGA)

- Mplus Version 6.0

- Person-centered latent growth modeling approach used to identify underlining heterogeneity in a sample (Wang & Bodner, 2007)

- Heterogeneity captured by a categorical latent variable (trajectory class)

- Models for 1, 2, 3, and 4 classes were tested
Trajectory Analyses

[Graph showing maternal PTSD symptoms over time from pregnancy to 2 years postpartum]
### Trajectory Analyses

#### Fit Indices for Latent Classes

<table>
<thead>
<tr>
<th>Model</th>
<th>Entropy</th>
<th>BIC</th>
<th>LMR-LRT</th>
<th>BLRT</th>
<th>( p )</th>
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</thead>
<tbody>
<tr>
<td>2-class</td>
<td>.89</td>
<td>1646</td>
<td>-844.56</td>
<td>-844.56</td>
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<tr>
<td>3-class</td>
<td>.92</td>
<td>2420</td>
<td>-1202.70</td>
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<tr>
<td>4-class</td>
<td>.92</td>
<td>2415</td>
<td>-1183.88</td>
<td>-1183.88</td>
<td>= .68</td>
</tr>
</tbody>
</table>

Note. BIC = Baysian information criteria; LMR-LRT = Vuong-Lo-Mendell-Rubin Likelihood ratio test; BLRT = Bootstrap likelihood-ratio test; Model in bold face is the best fitting model.
# Trajectory Analyses

## Posterior Probabilities and Descriptive Statistics for the 2-class Model

<table>
<thead>
<tr>
<th>Class</th>
<th>Posterior probabilities</th>
<th>n (proportion of sample)</th>
<th>Slope</th>
<th>Intercept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>.968</td>
<td>15 (19%)</td>
<td>4.68</td>
<td>42.16</td>
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<tr>
<td></td>
<td>.032</td>
<td></td>
<td>$p = .282$</td>
<td>$p &lt; .001$</td>
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<tr>
<td>Class 2</td>
<td>.029</td>
<td>63 (81%)</td>
<td>-1.50</td>
<td>27.95</td>
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<tr>
<td></td>
<td>.971</td>
<td></td>
<td>$p = .089$</td>
<td>$p &lt; .001$</td>
</tr>
</tbody>
</table>
Increasing, $n = 7$
Stable-moderate, $n = 27$
Decreasing, $n = 15$
Stable-low, $n = 71$

Trajectory Analyses

$n = 15$

$n = 63$
Poor Romantic Relationship Quality

* Higher numbers represent poorer relationship quality

$$t = 3.43, \ p < .01$$
Perceived Family Support

\[ t = 2.30, p < .05 \]
Intimate Partner Violence

\[ t = 2.68, \ p < .05 \]
Parenting Stress

\[ t = 3.08, \ p < .01 \]
Intensity of Parenting Hassles

$t = 2.92, p < .01$
Across the transition to parenthood, a time that may be particularly activating of PTSD symptoms in mothers with a history of childhood physical and/or sexual abuse, close supportive relationships are important in promoting resilience (defined as low PTSD symptoms).

- Better romantic relationship quality
- More family support
- Less intimate partner violence

Parenting outcomes associated with resilience across the transition to parenthood include lower parenting stress and perceiving daily parenting hassles as less problematic or intense at 2 years after birth.

Results are consistent with previous research.
Future Research

✿ With larger sample sizes, explore additional trajectories of PTSD symptoms in this population

✿ Consider other indicators of resilience besides absence of PTSD symptoms, such as:
  o Absence of other mental health symptoms
  o Physical Health
  o Personal and maternal self-esteem
  o Education and employment
  o Relationships

✿ Investigate parenting outcomes that are based on observational or projective measures rather than solely parent-report, such as
  o Mother-child play interactions
  o Maternal attachment scripts
  o Maternal representations of the child
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  www.emich.edu/psychology/parenting
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We, Sarah Ahlfs-Dunn, Katherine Guyon-Harris, & Alissa Huth-Bocks, have no commercial relationships to disclose.
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