Effect of maternal borderline personality disorder on preschoolers' narrative representations

Jenny Macfie, Elaine Rivas, Jennifer Engle, Stephanie Hamilton & Rebecca Rathjen

Abstract

Borderline personality disorder (BPD) is a severe and chronic disorder of the self. The current study examined the narrative representations of children at high risk for developing BPD themselves: offspring of women with BPD. Children aged 4-6, \( n = 10 \), whose mothers have BPD were compared with children, \( n = 10 \), whose mothers do not have BPD. Controlling for verbal ability, children whose mothers have BPD told stories in which there were significantly more negative representations of mothers, marginally fewer positive representations of mothers, and significantly more intrusion of traumatic material and fear of abandonment than did comparisons.

Introduction

Borderline personality disorder (BPD)

- **BPD:** A severe and chronic disorder of the self first diagnosed in early adulthood
- **Symptoms:** Frantic efforts to avoid abandonment, suicidal and self-mutilating behavior, volatile relationships, affective instability, impulsive behavior, inappropriate anger, and an unstable sense of identity
- **Epidemiology:** 2-3% of the population, 75% women. 70-90% make suicidal gestures, 8-10% succeed

Developmental psychopathology

- **High risk groups:** Study of child development in a high risk group may inform preventive interventions (Cicchetti & Hinshaw, 2003; Cicchetti & Toth, 1992)
- **Offspring:** Children of mothers suffering from BPD comprise a high risk group for developing BPD themselves (Loranger, Oldham, & Tulis, 1982; Torgersen et al., 2000)

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Attachment in BPD
- BPD has been characterized as a disorder of attachment (Fonagy, Target, & Gergely, 2000)
- 8 out of 10 infants of mothers with BPD were classified as having a disorganized (D) attachment (Hobson, Patrick, Crandell, Garcia-Perez, & Lee, in press)

Narratives in high-risk samples
- Representations of parents and children distinguished maltreated from nonmaltreated children (Macfie et al., 1999; Toth, Cicchetti, Macfie, & Emde, 1997; Toth, Maughan, Manly, Spagnola, & Cicchetti, 2003)
- Moreover, narrative representations of adults with BPD were more malevolent and less empathic than were those of comparisons (Nigg, Lohr, Westen, Gold, & Silk, 1992)

Gap in prior research
- No research on narrative representations of children of mothers who have BPD
- Important because of salience of attachment related themes for BPD including negative representations of self and other, disorganization/intrusion of traumatic material, and fear of abandonment

The current study
- Narrative representations are assessed in 4 to 6-year-old offspring of women with BPD

Hypotheses
- Compared with offspring of mothers without BPD, offspring of mothers with BPD would portray:
  1. fewer positive and more negative representations of mothers and fathers
  2. fewer positive and more negative representations of children
  3. more disorganization in the form of intrusion of traumatic material
  4. more fear of abandonment

Method

Participants
- N= 20, average age 5 yrs 3 mos, SD = 8.5 mos
- n= 10 mothers had BPD and n = 10 did not
- Groups matched on socioeconomic status (low), age and race. See Table 1
- Mothers with BPD recruited from inpatient and outpatient clinics
- Mothers without BPD recruited from Boys and Girls Clubs, preschools and Head Start programs
Table 1. Demographics, child age and child verbal abilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Whole sample</th>
<th>BPD</th>
<th>Comparisons</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>N= 20</td>
<td>n= 10</td>
<td></td>
</tr>
<tr>
<td>Child age in years</td>
<td>5.29 (0.71)</td>
<td>5.16 (0.74)</td>
<td>5.42 (0.69)</td>
<td>0.81</td>
</tr>
<tr>
<td>PPVT</td>
<td>101.95 (9.89)</td>
<td>98.20 (9.74)</td>
<td>105.70 (8.96)</td>
<td>1.79*</td>
</tr>
<tr>
<td>EVT</td>
<td>99.70 (10.96)</td>
<td>94.89 (9.20)</td>
<td>104.6 (10.74)</td>
<td>2.19*</td>
</tr>
<tr>
<td>Family yearly income</td>
<td>32,073 (25,629)</td>
<td>32,167 (25,628)</td>
<td>31,980 (27,016)</td>
<td>0.02</td>
</tr>
<tr>
<td>Mother High School</td>
<td>35%</td>
<td>20%</td>
<td>50%</td>
<td>5.87</td>
</tr>
<tr>
<td>Mother single</td>
<td>35%</td>
<td>40%</td>
<td>30%</td>
<td>0.22</td>
</tr>
<tr>
<td>Child gender (girls)</td>
<td>45%</td>
<td>40%</td>
<td>50%</td>
<td>0.20</td>
</tr>
<tr>
<td>Child minority</td>
<td>25%</td>
<td>30%</td>
<td>20%</td>
<td>0.27</td>
</tr>
</tbody>
</table>

*p < .10; *n < .05

Procedures and Measures

**BPD diagnosis**

- *SCID-II* (First, Gibbon, Spitzer, Williams, & Benjamin, 1997)

**Narrative story stems**

- The child was asked to complete ten story-stems from the *MacArthur Story Stem Battery*, MSSB, using family dolls and props (Bretherton, Oppenheim, Buchsbaum, Emde, & the MacArthur Narrative Group, 1990)
  - Dolls were matched to gender and ethnic background of child
  - Each story stem was introduced by a female examiner in a dramatic, engaging fashion
  - The resulting narratives were videotaped
  - Stories utilized:
    - Spilled Juice, Hurt Knee, Monster in the Bedroom, Departure, Reunion, Lost Keys, Hot Gravy, Horsie, Barney, and Exclusion

**Narrative coding manuals**


- Codes:
  - **positive mother** (caregiving, caretaking, e.g. puts a bandaid on hurt knee)
  - **negative mother** (aggression, neglect, e.g. leaves home to live somewhere else without the child)
  - **positive child** (empathy, self esteem, e.g. child cleans up spilled juice)
  - **negative child** (aggression, self-derogation, e.g. child called "stupid")
Intrusion of traumatic material (extraneous disorganized themes, e.g. sharks and alligators kill the child following argument between parents over who lost the car keys)

2. Narrative Emotion Coding (Warren, Mantz-Simmons, & Emde, 1993)

- Code:
  - fear of abandonment = disappointment/loss-1 (child denies or resolves loss presented in the story stem immediately. e.g., story stem says parents are going away for the weekend, but child says they change their mind and stay home)

Results

Hypothesis testing
- A Multivariate Analysis of Covariance (MANCOVA) was conducted with EVT and PPVT (verbal ability) as covariates
- There was a significant overall effect for BPD Status (Wilks's approximate $F(8,9) = 8.32, p < .01$)
- Univariate $F$ tests revealed that offspring of women who had BPD portrayed:
  - more negative mothers
  - fewer positive mothers (marginally)
  - more intrusion of traumatic material
  - more fear of abandonment
  - however, there were no differences in father or child representations

- See Table 2

Table 2, BPD group differences in narrative variables

<table>
<thead>
<tr>
<th>Narrative variable</th>
<th>Whole sample</th>
<th>BPD</th>
<th>Comparisons</th>
<th>$F$ (df = 1,16)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N = 20$ M (SD)</td>
<td>$n = 10$ M (SD)</td>
<td>$n = 10$ M (SD)</td>
<td></td>
</tr>
<tr>
<td>Positive mother</td>
<td>2.90 (2.38)</td>
<td>2.00 (1.83)</td>
<td>3.80 (2.62)</td>
<td>3.80</td>
</tr>
<tr>
<td>Positive father</td>
<td>2.15 (1.72)</td>
<td>1.70 (1.25)</td>
<td>2.60 (2.07)</td>
<td>0.77</td>
</tr>
<tr>
<td>Negative mother</td>
<td>1.60 (1.39)</td>
<td>2.30 (1.57)</td>
<td>0.90 (0.74)</td>
<td>4.54*</td>
</tr>
<tr>
<td>Negative father</td>
<td>0.90 (1.07)</td>
<td>1.20 (1.32)</td>
<td>0.60 (0.70)</td>
<td>2.46</td>
</tr>
<tr>
<td>Positive child</td>
<td>1.50 (1.10)</td>
<td>1.40 (0.97)</td>
<td>1.60 (1.26)</td>
<td>0.003</td>
</tr>
<tr>
<td>Negative child</td>
<td>1.95 (2.16)</td>
<td>2.00 (1.94)</td>
<td>1.90 (2.46)</td>
<td>1.83</td>
</tr>
<tr>
<td>Intrusion of traumatic material</td>
<td>0.95 (1.79)</td>
<td>1.80 (2.25)</td>
<td>0.10 (0.32)</td>
<td>5.37*</td>
</tr>
<tr>
<td>Fear of abandonment</td>
<td>0.35 (0.59)</td>
<td>0.70 (0.67)</td>
<td>0.00 (0.00)</td>
<td>11.65**</td>
</tr>
</tbody>
</table>

$p < .10; *p < .05; **p < .01$
Correlations among narrative codes

- *Intrusion of traumatic material* was significantly correlated with the presence of *negative mothers* but not with the absence of positive mothers
- *Fear of abandonment* was marginally significantly correlated with the absence of positive mothers but not with the presence of negative mothers
- See Table 3

Table 3. Inter-correlations among narrative variables in the whole sample, N=20

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Positive mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Positive father</td>
<td>.67**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Negative mother</td>
<td>-.36</td>
<td>-.59**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Negative father</td>
<td>-.27</td>
<td>-.33</td>
<td>.50*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Positive child</td>
<td>.10</td>
<td>.10</td>
<td>.03</td>
<td>-.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Negative child</td>
<td>-.57**</td>
<td>-.51</td>
<td>.20</td>
<td>.25</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>7. Intrusion of traumatic material</td>
<td>-.33</td>
<td>-.20</td>
<td>.46*</td>
<td>.38</td>
<td>-.28</td>
<td>.18</td>
</tr>
<tr>
<td>8. Fear of abandonment</td>
<td>-.43</td>
<td>.16</td>
<td>.12</td>
<td>-.36</td>
<td>.20</td>
<td>.31</td>
</tr>
</tbody>
</table>

*p < .10; *p < .05; **p < .01

Discussion

Putative precursors to BPD

- This study provided a window on vulnerabilities in representational development in BPD offspring that may be risk factors for developing BPD
- Offspring of women with BPD told stories in which mothers (but not fathers) were more negative and less positive, and with more intrusion of traumatic material and fear of abandonment than did comparison children

Fear of abandonment

- *Intrusion of traumatic material* was associated with negative representations of mothers, but *fear of abandonment* was associated with the absence of positive mothers
- Individuals with BPD may use transitional objects such as teddy bears in the absence of positive maternal representations (Gunderson, 2001)

Preventive interventions

- Attachment interventions may be appropriate for the offspring of women with BPD as have been conducted with maltreated children (Toth et al., 2003) to foster the internalization of positive representations of mothers
References


