Trajectories To Borderline Personality Disorder In Females & Males

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National Education Alliance
March 2, 2013

Survey Findings

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We were interested in obtaining parents’ opinions regarding their…

We aimed to:

A. Describe the developmental trajectory of BPD in males and females

B. Contrast the male trajectory with that of females who develop BPD

C. Identify “at-risk” children and adolescents of both genders

D. Identify features that may be targeted for preventive treatment

Male and female children with BPD

and male and female unaffected siblings.
What do we know about developmental precursors to BPD?

Surprisingly little is known about the childhood and adolescent antecedents of adult BPD, especially for males. Most studies have focused on risk factors pertaining to trauma, neglect and deficient parenting (e.g., Herman et al., 1989; Zanarini et al., 1989; Helgeland and Torgersen, 2004). Sexual abuse histories may be more prevalent in females.

Helgeland and Torgersen (2004) noted “protective factors” such as artistic talents, superior school performance and above-average intellectual skills decreased the risk.

Crick et al. (2005), a developmental psychologist, proposes a theoretical model of childhood features of BPD. Included are five childhood indicators of BPD:

- Hostile, paranoid world view
- Intense, unstable, inappropriate emotion
- Overly close relationships
- Impulsivity
- Lack of sense of self
What do we know about **developmental precursors** to MALE BPD?

- Adolescent patients of both genders were described using the Shedler-Westen Assessment Procedure (SWAP-200-A) to identify profiles for individuals who met BPD. Boys with BPD were found to be more aggressive, disruptive and antisocial, but more detailed analysis was not possible due to the small number of BPD adolescent males (Bradley et al, 2005).

- DSM-IV BPD criteria of affective instability and impulsivity were found to differ across gender and age. Males reported more impulsivity and less affective instability than females (Aggen et al, 2009).

- Data from the Collaborative Longitudinal Personality Disorder Study (CLPS) of childhood trauma history, temperament and co-morbid psychiatric disorders suggested “women and men with BPD display more similarities than differences” (Johnson et al, 2003).
Why solicit parental viewpoints?

Parents can provide important details about early development.

They have a longitudinal view of their offspring and can provide information about unaffected siblings.

Limitations may exist in the ability of parents to assess more internal experiences such as sense of emptiness.

Parental views eliminate the problem of the “negative halo” recall bias (Paris 2000), particularly prevalent in individuals with BPD.
NEA-BPD WEBSITE & SURVEY

www.borderlinepersonalitydisorder.com

Parent Section

Background

Mission

Survey

Latest News

Events

Resources
SURVEY DESIGN

Approved by IRB
Anonymous
200 Questions
45-60 Minutes

MSI-BPD Screen
Demographics
Child
Parent
Epochs
Infancy/Toddlerhood
Childhood
Adolescence
Adverse Life Events
Family Burden
Evaluation
Diagnosis
Treatment

Infancy/Toddlerhood
Colic
Excessive Separation Anxiety
Absence of Separation Anxiety
Inconsolable
Inability to Self-soothe
Sensory Problems
Eating Issues
Unusual Sensitivity
Moodiness
Sleep Issues
Motor Delay
Cognitive Delay
Social Delay
Verbal Delay
Physical Abuse
Sexual Abuse

Childhood
Unusual Sensitivity
Moodiness
Impulsivity
Difficulty Making Friends
Conflict with Authority
Lying
Suspension/Expulsion
Bully Victim
Bully Perpetrator
Poor Grades
Special Education
Body Image Issues
Emptiness
Boredom
Verbal Outbursts
Alcohol Abuse
Substance Abuse
Sexual Abuse

Adolescence
Moodiness
Sensitivity
Impulsivity
Destruction
Arrests
Alcohol Abuse
Substance Abuse
Anorexia
Bulimia
Body Image Issues
Emptiness
Delusions
Paranoia
Odd Thinking
Physical Abuse
Sexual Abuse
Violence Victim
Lying
Difficulty Making Friends
Promiscuity
Fighting
You are being asked to complete an anonymous survey as the parent of a son or daughter with borderline personality disorder (BPD). We anticipate that this research will contribute to the mental health community's understanding of BPD, and that patients with BPD and their family members will benefit from the results of our findings. Your participation is voluntary, and your responses will be kept strictly confidential.

The researchers will not be informed of any personal information about you. The study includes questions about the child's temperament, early childhood experiences, and current coping mechanisms. Your child's participation in this study may include a variety of experiences, including potential stressors and challenges.

### This column refers to the child with BPD.

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you notice anything unusual in infancy or toddlerhood?</td>
<td></td>
</tr>
<tr>
<td>- Colic</td>
<td></td>
</tr>
<tr>
<td>- Excessive Separation Anxiety</td>
<td></td>
</tr>
<tr>
<td>- Inability to be Consoled</td>
<td></td>
</tr>
<tr>
<td>- Inability to Self-Soothe</td>
<td></td>
</tr>
<tr>
<td>- Sensory Problems</td>
<td></td>
</tr>
<tr>
<td>- Picky Eating</td>
<td></td>
</tr>
<tr>
<td>- Poor Temperament</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have any of this child's closest relationships been troubled by a lot of arguments or repeated</td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td></td>
</tr>
<tr>
<td>- Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has this child deliberately hurt him/herself (e.g., punched, cut or burned him/herself)?</td>
<td></td>
</tr>
<tr>
<td>- No</td>
<td></td>
</tr>
<tr>
<td>- Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>How about made a suicide attempt?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>At what age was this child diagnosed with BPD?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who gave the official BPD diagnosis?</td>
<td></td>
</tr>
<tr>
<td>- Psychiatrist (M.D.)</td>
<td></td>
</tr>
<tr>
<td>- Pediatrician (M.D.)</td>
<td></td>
</tr>
</tbody>
</table>
7204 Surveys Started
→ 5325 Unfinished
1879 Surveys Finished
→ 952 did not meet criteria for proband or unaffected sibling
→ 927 Usable Cases

927 Subjects

561 Probands
464 Female Probands
97 Male Probands

366 Siblings
200 Female Siblings
166 Male Siblings

NEA-BPD
1879 completed surveys

664 BPD

263 siblings

952 excluded

BPD offspring
1) MSI-BPD score >7 (scale embedded in the survey)
   AND
2) BPD dx given by a professional

Not analyzed
1) sibling w/ MSI-BPD >7
2) BPD offspring with MSI-BPD <7
3) BPD offspring without formal

Unaffected Offspring
1) MSI-BPD score of 7 or below
   AND
2) NO BPD dx
# PARENT DEMOGRAPHICS

<table>
<thead>
<tr>
<th><strong>Age (Mean [SD])</strong></th>
<th>54.2 [8.1] years old</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>Female 94.5%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>Caucasian 94.1%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Some HS 2.8%</td>
</tr>
<tr>
<td></td>
<td>HS Grad 13.1%</td>
</tr>
<tr>
<td></td>
<td>Some University 26.2%</td>
</tr>
<tr>
<td></td>
<td>University Grad 26.8%</td>
</tr>
<tr>
<td></td>
<td>Graduate studies 8.5%</td>
</tr>
<tr>
<td></td>
<td>GS Grad 22.0%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td>Married 62.5%</td>
</tr>
<tr>
<td></td>
<td>Divorced 18.2%</td>
</tr>
<tr>
<td></td>
<td>Remarried 9.8%</td>
</tr>
<tr>
<td></td>
<td>Widowed 4.4%</td>
</tr>
<tr>
<td></td>
<td>Separated 2.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Household Income Bracket</strong></th>
<th>&lt;25k</th>
<th>9.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25-50k</td>
<td>20.9%</td>
</tr>
<tr>
<td></td>
<td>50-75k</td>
<td>22.1%</td>
</tr>
<tr>
<td></td>
<td>75-100k</td>
<td>17.4%</td>
</tr>
<tr>
<td></td>
<td>100-200k</td>
<td>20.3%</td>
</tr>
<tr>
<td></td>
<td>200-500k</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td>500k-1m</td>
<td>1.6%</td>
</tr>
<tr>
<td></td>
<td>&gt;1m</td>
<td>.2%</td>
</tr>
</tbody>
</table>
### OFFSPRING DEMOGRAPHICS

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>27.0 (8.2)</td>
<td>26.4 (8.2)</td>
<td>25.8 (7.3)</td>
<td>25.7 (8.2)</td>
</tr>
<tr>
<td>Age at BPD Dx</td>
<td>23.8 (6.4)</td>
<td>23.4 (6.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSI-BPD Criteria</td>
<td>8.9 (1.0)</td>
<td>1.1 (1.4)</td>
<td>8.8 (1.0)</td>
<td>1.3 (1.6)</td>
</tr>
</tbody>
</table>
**PROBAND PSYCHIATRIC HISTORY**

**Family**

- Borderline Personality: 27%
- Major Depression: 30%
- Bipolar: 16%
- PTSD: 16%
- Anxiety spectrum: 34%
- Alc./Substance Abuse: 35%

**Child**

<table>
<thead>
<tr>
<th></th>
<th>male</th>
<th>female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depression</td>
<td>39%</td>
<td>77.8%</td>
</tr>
<tr>
<td>Bipolar</td>
<td>35%</td>
<td>56.8%</td>
</tr>
<tr>
<td>Psychotic spectrum</td>
<td>9%</td>
<td>7.7%</td>
</tr>
<tr>
<td>ADHD</td>
<td>46%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Oppositional Defiant</td>
<td>10%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>
Table 1a

**Significant Differences between BPD Offspring and Unaffected Siblings**

<table>
<thead>
<tr>
<th>Birth</th>
<th>Prevalence in BPD Offspring</th>
<th>Prevalence in Non-BPD Siblings</th>
<th>Chi-Square&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Significance&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult Pregnancy</td>
<td>27.01% (n=57)</td>
<td>26.76% (n=19)</td>
<td>.002</td>
<td>.967</td>
</tr>
<tr>
<td>Eventful Labor</td>
<td>29.24% (n=62)</td>
<td>33.33% (n=24)</td>
<td>.425</td>
<td>.514</td>
</tr>
</tbody>
</table>

Note: <sup>a</sup>Pearson Chi-Square statistic

<sup>b</sup>Asymp. Sig. 2-Sided

* Significant Difference (Holm-Bonferroni Correction applied within each variable group.)
## INFANCY & TODDLERHOOD - PREDICTORS OF FEMALE BPD

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Bracket</td>
<td>.007</td>
<td>.049</td>
<td>.023</td>
<td>1</td>
<td>.880</td>
<td>1.007</td>
</tr>
<tr>
<td>Child Age</td>
<td>.005</td>
<td>.012</td>
<td>.140</td>
<td>1</td>
<td>.709</td>
<td>1.005</td>
</tr>
<tr>
<td>Inability to Self-Soothe</td>
<td>1.332</td>
<td>.432</td>
<td>9.502</td>
<td>1</td>
<td>.002</td>
<td>3.790</td>
</tr>
<tr>
<td>Unusual Temperament</td>
<td>1.148</td>
<td>.489</td>
<td>5.509</td>
<td>1</td>
<td>.019</td>
<td>3.151</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>1.103</td>
<td>.248</td>
<td>19.703</td>
<td>1</td>
<td>.000</td>
<td>3.012</td>
</tr>
<tr>
<td>Moodiness</td>
<td>.836</td>
<td>.369</td>
<td>5.122</td>
<td>1</td>
<td>.024</td>
<td>2.307</td>
</tr>
<tr>
<td>Sleep Issues</td>
<td>.556</td>
<td>.280</td>
<td>3.945</td>
<td>1</td>
<td>.047</td>
<td>1.743</td>
</tr>
<tr>
<td>Social Delay</td>
<td>1.431</td>
<td>.427</td>
<td>11.254</td>
<td>1</td>
<td>.001</td>
<td>4.183</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>1.714</td>
<td>.634</td>
<td>7.318</td>
<td>1</td>
<td>.007</td>
<td>5.554</td>
</tr>
<tr>
<td>Constant</td>
<td>-.415</td>
<td>.422</td>
<td>.965</td>
<td>1</td>
<td>.326</td>
<td>.661</td>
</tr>
</tbody>
</table>
Did you notice anything unusual during infancy?

**Inability to Self-Soothe**
- 27%
- 4%

**Sensitivity**
- 50%
- 15%

**Excessive Separation Anxiety**
- 33%
- 12%

**Moodiness**
- 37%
- 7%
Female Childhood

- Anger Issues
- Sexual Abuse
- Physical Abuse
- Substance Abuse
- Alcohol Abuse
- Verbal Outbursts
- Boredom
- Emptiness
- Poor Body Image
- Special Education
- Poor Grades
- Rape Victim
- Bully Perpetrator
- Bully Victim
- Multiple Schools
- Suspension or Expulsion
- Detention
- Lying
- Ditching School
- Conflict with Authority
- Difficulty Making Friends
- Impulsivity
- Moodiness
- Sensitivity
- Unusual Temperament

Proband
Sibling
## CHILDHOOD - PREDICTORS OF FEMALE BPD

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Bracket</td>
<td>.003</td>
<td>.063</td>
<td>.003</td>
<td>1</td>
<td>.958</td>
<td>1.003</td>
</tr>
<tr>
<td>Child Age</td>
<td>.004</td>
<td>.016</td>
<td>.067</td>
<td>1</td>
<td>.796</td>
<td>1.004</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>.774</td>
<td>.252</td>
<td>9.427</td>
<td>1</td>
<td>.002</td>
<td>2.168</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>1.859</td>
<td>.372</td>
<td>24.925</td>
<td>1</td>
<td>.000</td>
<td>6.418</td>
</tr>
<tr>
<td>Difficulty with Friends</td>
<td>1.499</td>
<td>.315</td>
<td>22.584</td>
<td>1</td>
<td>.000</td>
<td>4.477</td>
</tr>
<tr>
<td>Lying</td>
<td>1.722</td>
<td>.387</td>
<td>19.797</td>
<td>1</td>
<td>.000</td>
<td>5.595</td>
</tr>
<tr>
<td>Body Image Issues</td>
<td>.946</td>
<td>.295</td>
<td>10.302</td>
<td>1</td>
<td>.001</td>
<td>2.575</td>
</tr>
<tr>
<td>Emptiness</td>
<td>2.544</td>
<td>.629</td>
<td>16.345</td>
<td>1</td>
<td>.000</td>
<td>12.730</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>1.632</td>
<td>.607</td>
<td>7.224</td>
<td>1</td>
<td>.007</td>
<td>5.115</td>
</tr>
<tr>
<td>Anger</td>
<td>.798</td>
<td>.395</td>
<td>4.083</td>
<td>1</td>
<td>.043</td>
<td>2.220</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.511</td>
<td>.536</td>
<td>7.960</td>
<td>1</td>
<td>.005</td>
<td>.221</td>
</tr>
</tbody>
</table>
Did you notice anything unusual during childhood?

- Difficulty Making Friends: 52% rated unusual, 10% rated usual.
- Sensitivity: 62% rated unusual, 25% rated usual.
- Impulsivity: 51% rated unusual, 6% rated usual.
- Lying: 42% rated unusual, 6% rated usual.
- Emptiness: 40% rated unusual, 2% rated usual.
- Body Image Concerns: 49% rated unusual, 13% rated usual.
Female Adolescence

- Suicidality/Parasuicidality
- Fights
- Rape Victim
- STDs
- Promiscuity
- Difficulty with Friends
- Verbal Outbursts
- Lying
- Aggression
- Violence Victim
- Anger
- Sexual Abuse
- Physical Abuse
- Odd Thinking
- Paranoia
- Homicidality
- Delusions
- Hallucinations
- Boredom
- Emptiness
- Body Image Issues
- Bulimia
- Anorexia
- Substance Abuse
- Alcohol Abuse
- Theft
- Arrests
- Property Destruction
- Recklessness
- Impulsivity
- Temperament
- Sensitivity
- Moodiness
- Property Destruction
- Physical Abuse
- Odd Thinking
- Bulimia
- Anorexia
- Substance Abuse
- Alcohol Abuse
- Theft
- Arrests
- Property Destruction
- Recklessness
- Impulsivity
- Temperament
- Sensitivity
- Moodiness

- Proband
- Sibling
## ADOLESCENCE - PREDICTORS OF FEMALE BPD

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Bracket</td>
<td>-0.076</td>
<td>0.084</td>
<td>0.814</td>
<td>1</td>
<td>0.367</td>
<td>0.927</td>
</tr>
<tr>
<td>Child Age</td>
<td>0.041</td>
<td>0.020</td>
<td>4.403</td>
<td>1</td>
<td>0.036</td>
<td>1.042</td>
</tr>
<tr>
<td><strong>Moodiness</strong></td>
<td>0.797</td>
<td>0.341</td>
<td>5.475</td>
<td>1</td>
<td>0.019</td>
<td>2.219</td>
</tr>
<tr>
<td><strong>Sensitivity</strong></td>
<td>0.784</td>
<td>0.336</td>
<td>5.446</td>
<td>1</td>
<td>0.020</td>
<td>2.190</td>
</tr>
<tr>
<td><strong>Impulsivity</strong></td>
<td>1.789</td>
<td>0.382</td>
<td>21.966</td>
<td>1</td>
<td>0.000</td>
<td>5.985</td>
</tr>
<tr>
<td><strong>Body Image Issues</strong></td>
<td>0.750</td>
<td>0.350</td>
<td>4.600</td>
<td>1</td>
<td>0.032</td>
<td>2.117</td>
</tr>
<tr>
<td><strong>Verbal Outbursts</strong></td>
<td>1.211</td>
<td>0.487</td>
<td>6.195</td>
<td>1</td>
<td>0.013</td>
<td>3.357</td>
</tr>
<tr>
<td><strong>Difficulty with Friends</strong></td>
<td>1.932</td>
<td>0.420</td>
<td>21.212</td>
<td>1</td>
<td>0.000</td>
<td>6.905</td>
</tr>
<tr>
<td><strong>Suicidality / Self-Harm</strong></td>
<td>1.934</td>
<td>0.352</td>
<td>30.117</td>
<td>1</td>
<td>0.000</td>
<td>6.919</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.652</td>
<td>0.746</td>
<td>23.983</td>
<td>1</td>
<td>0.000</td>
<td>0.026</td>
</tr>
</tbody>
</table>
Did you notice anything unusual during adolescence?

- **Moodiness**
  - 86%
  - 30%

- **Verbal Outbursts**
  - 71%
  - 32%

- **Impulsivity**
  - 73%
  - 8%

- **Unusual Sensitivities**
  - 74%
  - 27%

- **Difficulty with friends**
  - 55%
  - 6%

- **Suicidality/self harm**
  - 70%
  - 9%
Female Suicide & Self-Harm

- Self-Harm
  - Poisoning
  - Head Banging
  - Burning
  - Cutting
  - Probands
  - Siblings

- Suicidality
  - Completed
  - Attempts
  - Plans
  - Threats
  - Thoughts

- Self-Harm
  - Cutting
### Female Omnibus Regression

<table>
<thead>
<tr>
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<th>Wald</th>
<th>df</th>
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91.5% of cases predicted correctly.
R Square: Cox & Snell = .555; Nagelkerke = .784

Large Effect Size
Developmental Trajectory for Females

BPD prodromal features of affective sensitivity and inability to self-sooth can be identified as early as infancy.

BPD may be viewed as a temperamental disturbance in affect layered identity concerns manifesting in elementary school coupled with adolescent impulsivity and behavioral dyscontrol.

By adolescence, difficulties with aggression, relationships and self-destructive behaviors dominate the profile and the BPD trajectory is well defined by this epoch.
MALE BPD FINDINGS
### INFANCY & TODDLERHOOD - PREDICTORS OF MALE BPD

<table>
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80% of cases correctly predicted with logistic stepwise regression model

**Medium** Effect Size

Cox & Snell R^2  .325
Nagelkerke R^2 .445
INFANCY & TODDLERHOOD - PREDICTORS OF BPD

Unusual Sensitivity

- 49%
- 11%

Excessive Separation Anxiety

- 38%
- 7%

Sexual Abuse

- 11%
- 2%

Inability to Self-soothe

- 34%
- 4%
NEA-BPD

MALE CHILDHOOD

- Sexual Abuse *
- Physical Abuse *
- Substance Abuse *
- Alcohol Abuse *
- Verbal Outbursts *
- Boredom *
- Emptiness *
- Body Image Issues *
- Special Education
- Poor Grades *
- Bully Perpetrator
- Bully Victim *
- Suspension/Expulsion
- Lying *
- Conflict with Authority *
- Difficulty Making Friends *
- Impulsivity *
- Moodiness *
- Unusual Sensitivity *

[Bar chart showing percentages of Proband and Sibling for each issue]
**CHILDHOOD - PREDICTORS OF MALE BPD**

<table>
<thead>
<tr>
<th></th>
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86% of cases correctly predicted with logistic stepwise regression model.

Large Effect Size

Cox & Snell $R^2$ = .472

Nagelkerke $R^2$ = .647
CHILDHOOD - PREDICTORS OF BPD

- **Impulsivity**: 58% (pink) vs. 12% (blue)
- **Unusual Sensitivity**: 58% (pink) vs. 17% (blue)
- **Lying**: 39% (pink) vs. 7% (blue)
- **Body Image Issues**: 31% (pink) vs. 3% (blue)
- **Emptiness**: 41% (pink) vs. 1% (blue)
- **Sexual Abuse**: 13% (pink) vs. 2% (blue)
Moodiness *
Sensitivity *
Impulsivity *
Destruction *
Arrests *
Alcohol Abuse *
Substance Abuse *
Anorexia *
Bulimia *
Body Image Issues *
Physical Abuse
Sexual Abuse
Violence Victim *
Paranoia *
Delusions *
Emptiness *
Odd Thinking *
Lying *
Difficulty Making Friends *
Promiscuity *
Fighting *

ADOLESCENCE

Proband
Sibling

NEA-BPD
### ADOLESCENCE - PREDICTORS OF MALE BPD

<table>
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<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
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<th>Exp(B)</th>
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92% of cases correctly predicted with logistic stepwise regression model

**Large** Effect Size

Cox & Snell $R^2$ .591

NEA-BPD
ADOLESCENCE - PREDICTORS OF BPD

- Impulsivity: 78% (red) 13% (blue)
- Emptiness: 59% (red) 4% (blue)
- Frequent Lying: 56% (red) 8% (blue)
- Body Image Issues: 37% (red) 4% (blue)
- Suicidality: 64% (red) 11% (blue)
- Odd Thinking: 58% (red) 2% (blue)
ADOLESCENCE - SUICIDALITY & DELIBERATE SELF-HARM

Suicidal Thoughts

- 56% of individuals have suicidal thoughts.
- 9% have suicidal thoughts.

Suicidal Threats

- 36% of individuals have suicidal threats.
- 2% have suicidal threats.

Suicide Attempts

- 27% of individuals have made a suicide attempt.
- 1% have made a suicide attempt on average.

Deliberate Self-harm

- 48% of individuals have engaged in deliberate self-harm.
- 4% have engaged in deliberate self-harm.

Cutting

- 36% of individuals have cut themselves.
- 1% have cut themselves.

Burning

- 16% of individuals have burned themselves.
- 1% have burned themselves.

NEA-BPD
1) Little is known about the developmental trajectories to BPD in males.

2) Our parental survey of Male BPD offspring suggests:
   a) Male BPD prodromal features in of unusual sensitivity, separation anxiety and inability to self-sooth can be identified as early as infancy.
   b) BPD in males may be viewed as an early temperamental disturbance in sensitivity and anxiety, with impulsivity and problems of self manifesting in elementary school coupled with odd and unusual thinking and self harming behavior in adolescence.
   c) Sexual abuse in all epochs are important predictors of BPD in males.
Important Question:

Do the Developmental Trajectories to BPD Differ Between Males and Females?
INFANCY & TODDLERHOOD – GENDERED ODDS RATIOS FOR MALE AND FEMALE BPD PROBANDS

<table>
<thead>
<tr>
<th>Condition</th>
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<th>Female</th>
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<tr>
<td>Excessive Separation Anxiety</td>
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CHILDHOOD - GENDERED ODDS RATIOS FOR MALE AND FEMALE BPD PROBANDS

- Multiple Schools: Male 7.4, Female 2.5
- Body Image Issues: Male 14.4, Female 6.3
- Sensitivity: Male 6.5, Female 4.9
- Emptiness: Male 43.9, Female 57.6
- Sexual Abuse: Male 6.3, Female 7.2
- Lying: Male 9.1, Female 12.5
- Impulsivity: Male 10.0, Female 16.4
- Difficulty with Friends: Male 5.5, Female 10.4
- Anger: Male 4.5, Female 11.2
- Unusual Temperament: Male 3.7, Female 12.4

NEA-BPD
ADOLESCENCE - GENDERED ODDS RATIOS FOR MALE AND FEMALE BPD PROBANDS

Odd or Unusual Thinking
Body Image Issues *
Substance Abuse
Anorexia
Frequent Lying
Emptiness
Delusions
Impulsivity
Suicidality
Moodiness *
Unusual Temperament *
Difficulty with Friends *

Male
Female

NEA-BPD
MALE BPD ADOLESCENCE - TAG CLOUD

TAG CLOUD- MALES

sexuality
father
burned
girl
physical
violent
paranoid
behavior
drug
outburst
abuse
verbal
aggressive
property
drove
TAG CLOUD - FEMALES
1) The trajectory to BPD in males has similarities and differences from females who develop BPD. While the specific item predictors for the development of BPD are similar across gender:
   a) **Females** who develop BPD: prodromal affective instability, moodiness, interpersonal dysfunction and behavioral dyscontrol
   b) **Males** who develop BPD: odd thinking and body image concerns statistically differ from females who develop BPD.

2) Such data may help to identify at-risk children and adolescents who might be candidates for monitoring or early, potentially preventive, psychotherapeutic intervention.
Many thanks to my collaborators:

Elizabeth Diamond, M.A.
Raymond Goetz, Ph.D.
Perry Hoffman, Ph.D.
Uday Patil, M.A.
Lauren Steffel, M.A.
Joseph Triebwasser, M.D.

NEA-BPD for hosting the survey

And a special thanks to the parents who have filled out the survey
Publications from the NEA-BPD parent survey


