



# Testing Relations of Childhood Experiences, Temperament, and Borderline Personality Disorder



Baomie Fang

Faculty Sponsor: Professor Charles Sanislow

## Introduction

Borderline personality disorder (BPD) is a chronic personality disorder characterized by disturbed relationships, impulsive behaviors, and poorly regulated emotions. BPD often co-occurs with posttraumatic stress disorder (PTSD). Both disorders are linked to traumatic childhood experiences.

Three classes of factors were found to be linked to development of BPD: a family history of psychopathology, childhood trauma and/or abuse, and two personality traits, impulsivity/disinhibition and negative affectivity (Zanarini & Frankenburg, 1997). However, most previous research examined these factors independent of other contributing variables.

**The goal of this study is to extend on previous research in four ways:**

1. Test factors in a clinical population using data collected over a 10-year period from the Collaborative Longitudinal Personality Disorder Study (CLPS).
2. Include posttraumatic stress disorder (PTSD) along with BPD to examine specificity of model indicators to diagnosis.
3. Measure variables along a continuum to assess effect of severity.
4. Test three-factor model theory by correlating factors with the three different components.

## Background

Trull (2001) developed a multivariate model based on a nonclinical sample and found that the personality traits disinhibition and negative affectivity partially mediated the relations between childhood abuse and BPD and fully mediated the relations between parental psychopathology and BPD.

Researchers have also expressed concern with the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders) diagnosis criteria for BPD. The DSM requires five of nine criteria be met, allowing for numerous combinations of symptoms of a BPD diagnosis.

Sanislow's (2000, 2002) three-factor model parses the heterogeneity found within the current DSM-IV-TR BPD diagnostic criteria. The three-factor model (disturbed relationships, behavioral dysregulation, and affect dysregulation) is based on the theory that BPD is composed of “endophenotypes” that reflect different etiological pathways. Understanding the different underlying factors may help in tailoring treatment plans for BPD patients.

## Results

| Intercorrelations of Model Indicators |   |         |         |         |         |         |       |         |         |         |          |          |        | Three-Factor Model |    |                       |                          |                         |
|---------------------------------------|---|---------|---------|---------|---------|---------|-------|---------|---------|---------|----------|----------|--------|--------------------|----|-----------------------|--------------------------|-------------------------|
| Indicator                             | 1 | 2       | 3       | 4       | 5       | 6       | 7     | 8       | 9       | 10      | 11       | 12       | 13     | 14                 |    | Disturbed relatedness | Behavioral Dysregulation | Affective Dysregulation |
| 1. Sexual Abuse                       | 1 | .454*** | .159*** | .176*** | .342*** | .132**  | .072  | .079    | .161*** | .012    | .017     | -.060    | .223** | .276***            | 1  | .252***               | .219***                  | .243***                 |
| 2. Physical Abuse                     |   | 1       | .261*** | .301*** | .265*** | .150*** | .083  | .093*   | .065    | .078    | .010     | -.035    | .106   | .160***            | 2  | .179***               | .119**                   | .112**                  |
| 3. Emotional Abuse                    |   |         | 1       | .361*** | .188*** | .291*** | .000  | .126**  | .175*** | .043    | .016     | -.022    | .033   | .222***            | 3  | .232***               | .120**                   | .202***                 |
| 4. Witness to Abuse                   |   |         |         | 1       | .228*** | .194*** | .012  | .129**  | .049    | -.022   | -.015    | -.011    | .051   | .217***            | 4  | .205***               | .185***                  | .180***                 |
| 5. Childhood Trauma                   |   |         |         |         | 1       | .139**  | .064  | .026    | .129**  | -.014   | .036     | .043     | .155*  | .195***            | 5  | .175***               | .152***                  | .185***                 |
| 6. Parental Psychopathology           |   |         |         |         |         | 1       | -.016 | .059    | .034    | .029    | -.024    | -.052    | .103   | .108**             | 6  | .099*                 | .120**                   | .074                    |
| 7. NEO-PI-R Anxiety                   |   |         |         |         |         |         | 1     | .201*** | .221*** | .153*** | -.141*** | .045     | .114   | .236***            | 7  | .211***               | .204***                  | .205***                 |
| 8. NEO-PI-R Hostility                 |   |         |         |         |         |         |       | 1       | .276*** | .217*** | -.159*** | -.167*** | .032   | .179***            | 8  | .182***               | .098**                   | .166***                 |
| 9. NEO-PI-R Depression                |   |         |         |         |         |         |       |         | 1       | .163*** | -.100*   | -.032    | .195** | .358***            | 9  | .358***               | .236***                  | .315***                 |
| 10. NEO-PI-R Impulsivity              |   |         |         |         |         |         |       |         |         | 1       | -.172*** | -.103**  | -.019  | .034               | 10 | .048                  | .02                      | .015                    |
| 11. NEO-PI-R Self-Discipline          |   |         |         |         |         |         |       |         |         |         | 1        | .202***  | .008   | -.010              | 11 | -.017                 | .035                     | -.037                   |
| 12. NEO-PI-R Deliberation             |   |         |         |         |         |         |       |         |         |         |          | 1        | -.038  | .062               | 12 | .068                  | .05                      | .038                    |
| 13. PTSD                              |   |         |         |         |         |         |       |         |         |         |          |          | 1      | .191**             | 13 | .172*                 | .07                      | .250**                  |
| 14. BPD                               |   |         |         |         |         |         |       |         |         |         |          |          |        | 1                  | 14 | .915***               | .797***                  | .886***                 |

\*\*\*. p < 0.001  
\*\*. p < 0.01  
\*. p < 0.05

Note. The CLPS sample is composed of 668 treatment seeking patients. Sexual, physical, emotional, and witness to abuse, as well as childhood trauma and parental psychopathology were coded 1 (present) or 0 (absent). PTSD was coded 0 = absent, 1 = full remission, 2 = currently in remission, 3 = present. BPD score was calculated as a sum of subclinical and clinical features of the BPD ratings scale of the Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV). NEO-PI-R = Revised NEO Personality Inventory. The three factors disturbed relatedness (unstable relationships, identity disturbance, chronic feelings of emptiness, stress-related paranoid ideation), behavioral dysregulation (impulsivity, self-harming behavior), and affective dysregulation (affective instability, inappropriate anger, avoidance of abandonment) were calculated from a confirmatory factor analysis of DIPD-IV BPD criteria ratings.

## Measures

**Sexual abuse** - Composed of female and male caretaker, and other sexual abuse items from the Childhood Experiences Questionnaire (CEQ-R; Zanarini, 1992).

**Physical abuse** - Composed of female and male caretaker physical abuse items from the CEQ-R.

**Emotional abuse** - Composed of caretaker physical neglect, emotional withdrawal, emotional abuse, etc., items from the CEQ-R.

**Witness to abuse** - Composed of witness to verbal, physical, and sexual violence items from the CEQ-R.

**Childhood trauma** - Under 18 age at first occurrence, composed of sexual assault, victim of attack, and witness to violence items of the Trauma Addendum section of the The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I).

**Parental psychopathology** - Composed of caretaker incarceration and mental illness items from the CEQ-R.

**Personality traits** - Facets of the Revised NEO Personality Inventory (NEO PI-R) were used to calculate disinhibition (impulsivity, self-discipline, deliberation) and negative affect (anxiety, hostility, depression).

**PTSD diagnosis** - Baseline diagnostic ratings were used from the SCID-I.

**BPD diagnosis** - Calculated as a sum of ratings, both clinical and nonclinical, of BPD diagnosis from the Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV; Zanarini, 1996).

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## Discussion

### Conclusions

As expected, there were strong correlations between childhood trauma and abuse with BPD. Parental psychopathology was also correlated, though not as strongly as childhood abuse. This reflects Trull’s findings and may be explained by the potential mediating effect of the two personality traits.

Sexual abuse appears to be related to both PTSD and BPD while physical and emotional abuse were specific to BPD. This suggests there is specificity in the types of abuse as they are related to psychopathology.

While all facets of the personality trait negative affectivity were significantly correlated with BPD, the personality trait inhibition showed mixed results. This suggests that a disruption in the ability to regulate emotion leads to disruptive behaviors characteristic of BPD, not a predisposition to impulsivity.

### Further research

The results from this study will be used to develop a structural model of BPD testing mediation effects of personality traits on childhood experiences.

Additionally, because the data come from a prospective 10-year longitudinal study, the model will inform the course of BPD (chronic disorder) and help to distinguish BPD features from PTSD (acute disorder).

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