

# Indicators of a Structural Model of Borderline Personality Disorder

Yumengxi Fu, QAC Summer 2012

Faculty Mentor: Charles Sanislow



## Introduction

Borderline personality disorder (BPD) is a severe form of psychopathology characterized by impulsivity, disturbance in self-image, instability in interpersonal relationships and turbulent affectivity (APA, 2000). Childhood abuse and temperament are thought to play a role in the development of BPD.

It is believed that structural equation modeling that incorporates several etiological factors (e.g., parental psychopathology, childhood abuse and personality) at the same time is a better fit to describe the underlying mechanisms of BPD features than single equation modeling (Trull, 2001).

The purpose of this study is to identify relevant variables in the Collaborative Longitudinal Personality Disorders Study (CLPS) to serve as indicators of etiological factors of a structural equation model of BPD features.

## Methods

### Participants

- The CLPS sample consisted of 266 males and 467 females between the ages of 18 and 45 years (mean=32.5 years, SD=8.112 years).
- Participants were predominantly Caucasian (69%) and single (57%).
- Among the 733 individuals, 668 were recruited as the original baseline sample and an additional sample of 65 African American and Hispanic participants were followed for 2 of the 10 years.

### Measures

- Diagnostic interview for DSM-IV Personality Disorders (DIPD-IV)**
  - Evaluates personality disorders in the DSM-IV
- NEO-Personality Inventory-Revised (NEO-PI-R)**
  - Evaluates 5 FFM personality traits and 30 facets
- Structured Interview for DSM-IV Axis I (SCID-I)**
  - Evaluates major disorders coded in Axis I
- Revised Childhood Experience Questionnaire (CEQ-R)**
  - Evaluates negative/positive childhood experience
- Trauma Addendum**
  - Evaluates occurrence of traumatic experience

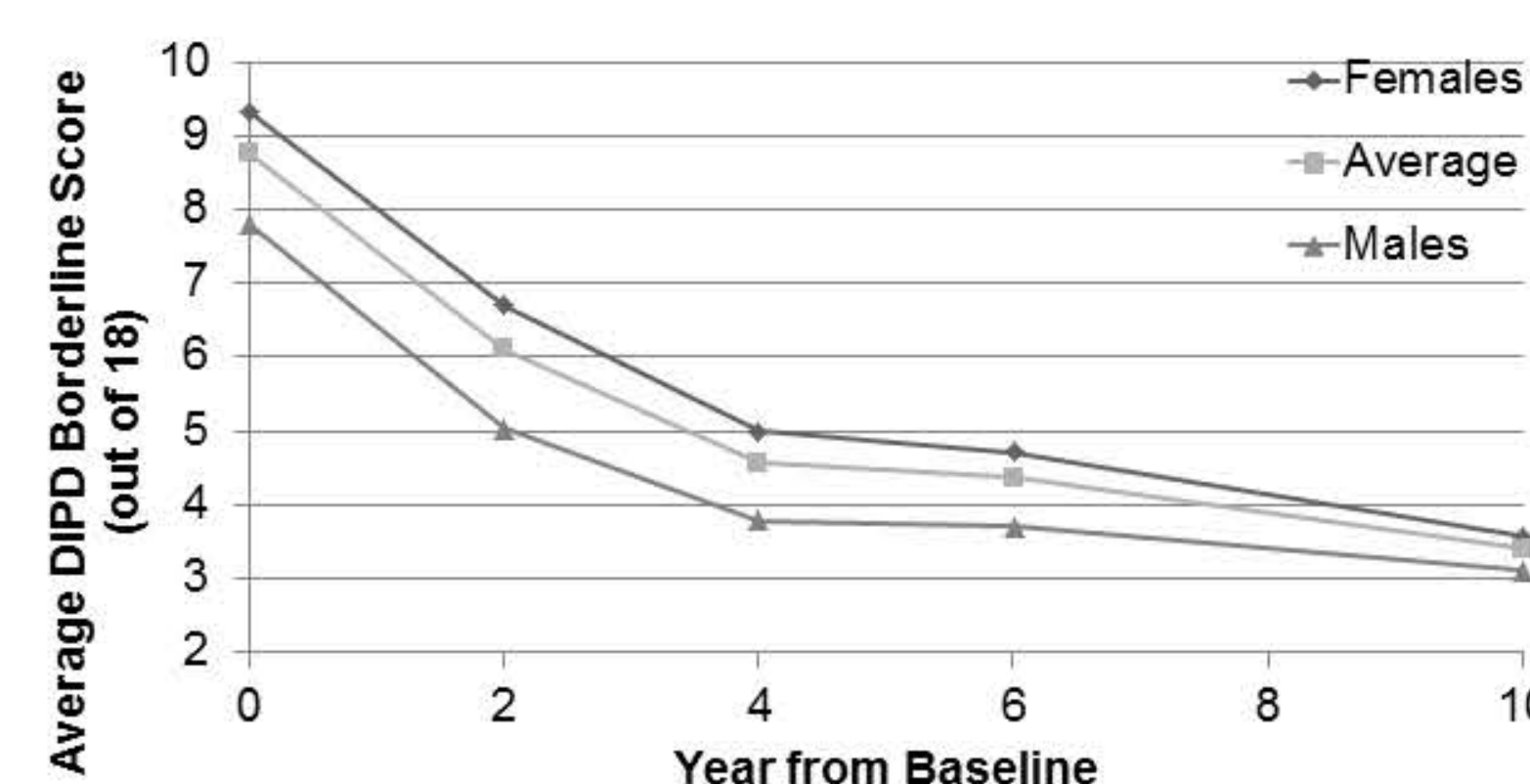
### Procedure

- Variables hypothesized to indicate BPD features, personality traits and childhood abuse were identified at each time point when the assessment was done.
- Variables were then merged for each participant and composite variables were calculated if necessary.
- ANOVA and Chi-square statistical tests were used to evaluate these variables.

## Results

### Part 1: DIPD-IV Borderline Scores: Indicator of BPD Features

Figure 1. Average DIPD Borderline Score across Time by Gender

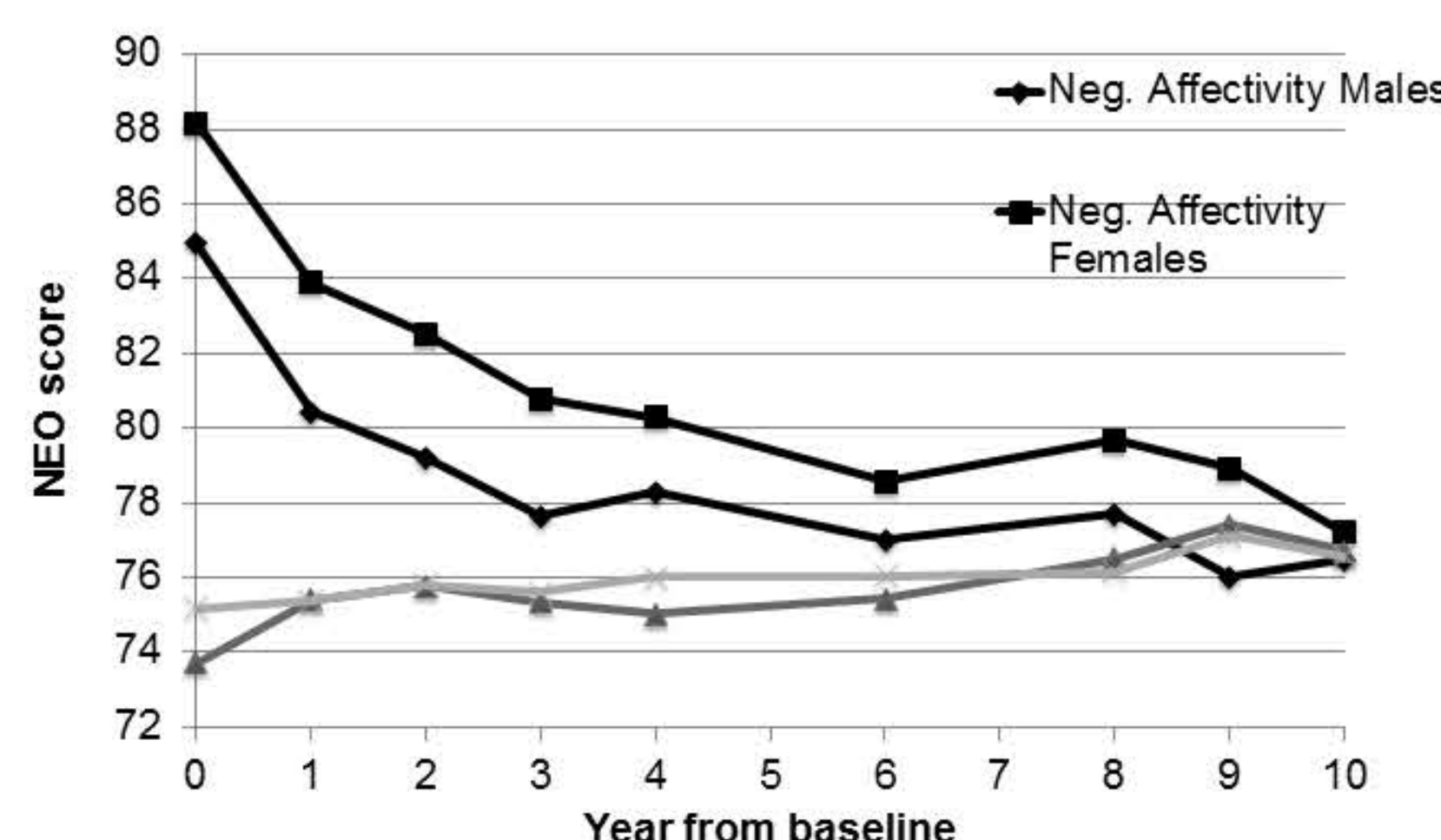


Females were more likely to score higher on DIPD-IV BPD items than males except at 10 years ( $p < .01$ ), replicating prior research.

Average DIPD-IV BPD scores were also compared across different racial groups. Hispanic participants were more likely to score higher only at baseline and 4 years ( $p < .01$  and  $p < .05$ ).

### Part 2: NEO-PI-R Scores: Indicators of Personality Traits

Figure 2. Negative Affectivity and Disinhibition across Time by Gender

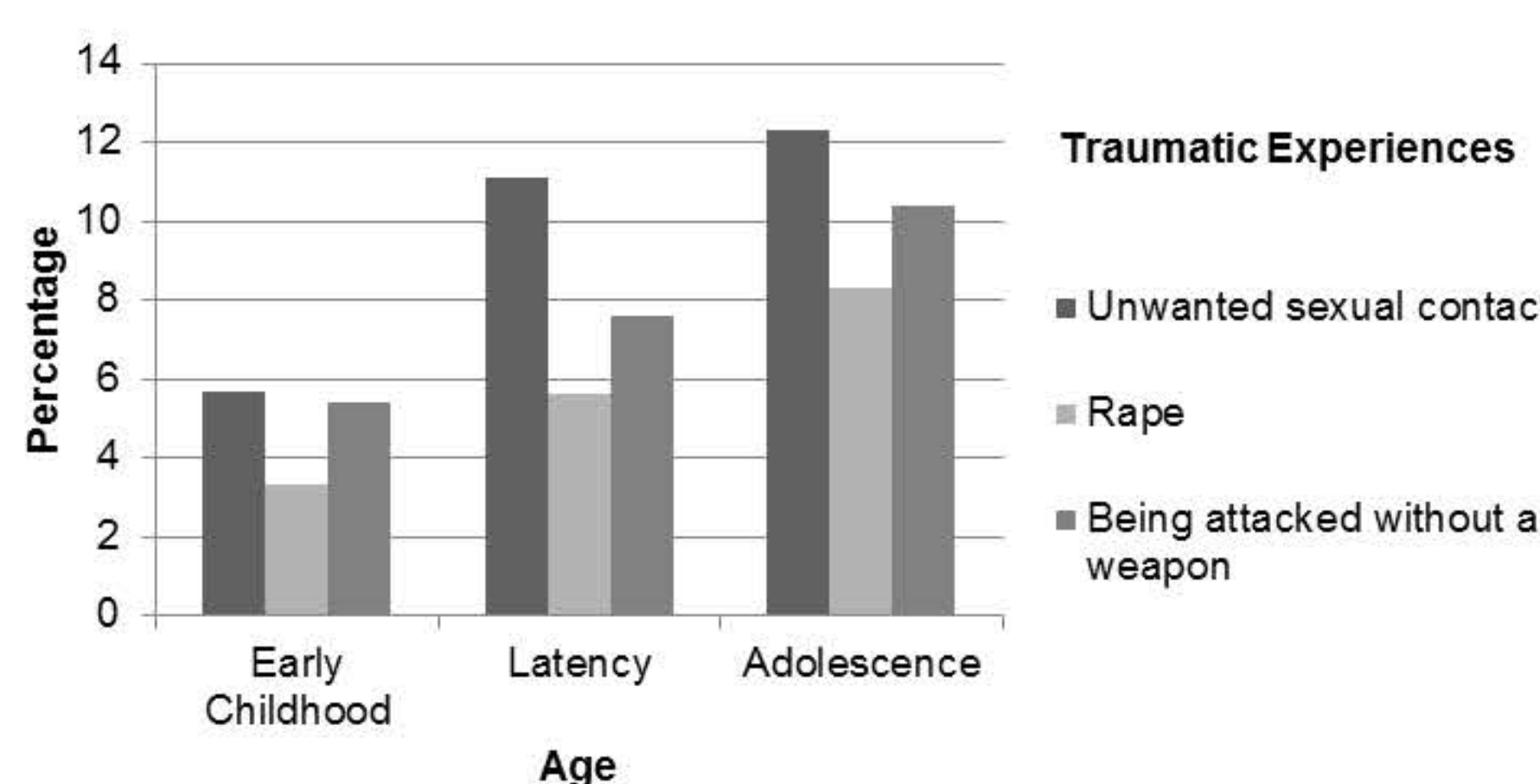


Females scored significantly higher on negative affectivity from baseline to 3 years ( $p < .05$ ) and on disinhibition at baseline ( $p < .05$ ).

No significant results found for different racial groups.

### Part 3: Parental Failure, Traumatic Experiences and PTSD Onset: Indicators of Childhood Abuse

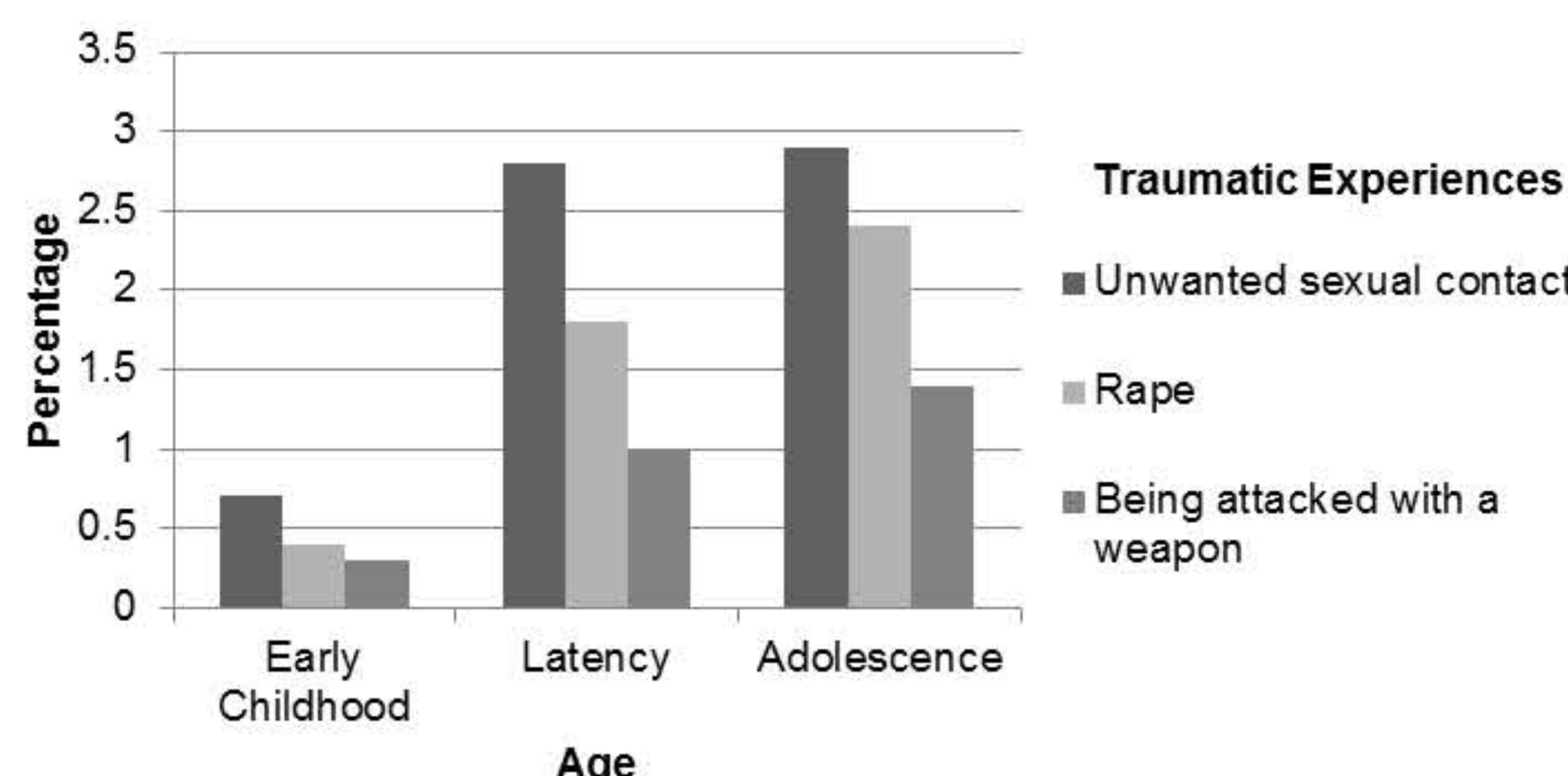
Figure 3. People who experienced Parental Abuse/Neglect and a Traumatic Experience



Note: Early childhood = 0-5 years, Latency = 6-12 years, Adolescence = 13-17 years

All results were significant ( $p < .01$ ), suggesting that people who experienced parental abuse and neglect were more likely to report these 3 traumatic incidents. Other traumatic experiences (e.g., military combat and fear of being killed) were also examined but no significant results were found.

Figure 4. Association between a Traumatic Experience and Onset of PTSD



All results were significant ( $p < .01$ ), which suggests that the age of PTSD onset corresponds well with the occurrence of these 3 traumatic experiences. Other traumatic experiences (e.g., military combat and fear of being killed) are examined but no significant results were found.

Seven parental neglect items were analyzed and they were all found to be significantly associated with emotional, verbal, physical and sexual abuse in all three childhood periods.

## Discussion

- The descriptive statistics of DIPD-IV BPD scores replicate prior research, which suggest that DIPD-IV BPD scores represent the BPD construct (i.e., BPD features). Future work will expand our measure of BPD features to include self-report instruments (e.g., Schedule for Nonadaptive and Adaptive Personality).
- Two personality traits (negative affectivity and disinhibition) extracted from the NEO scores showed that women are more likely to score higher on both measures. Interestingly, decreasing negative affectivity scores were observed, which may be related to the remission of BPD over time. In future research, we aim determine if a small subset of participants remain resistant to treatment. If so, it might be reasonable to distinguish this group from less ill participants and impose different models on each group.
- The significant association between parental failure, several traumatic experiences and onset of PTSD implies that these three measures *collectively* represent the latent variable "childhood abuse". However, the high correlation between parental neglect and abuse suggests that these two variables may not be easily distinguished. Future work will determine if they are driven by one single underlying factor, or if they can be dissociated.
- In the next stage of this research, we will use factor analysis to model each set of variables to serve as respective indicators. These will be included in a structural model to test these variables while controlling for potentially shared variance. This will help to clarify the specificity of the role of each of the factors in the etiology and maintenance of BPD.

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