A moderation analysis of two emotion regulation strategies between adverse childhood experiences and borderline personality disorder.

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Research Objectives
The present study aims to understand the moderating effects of two emotion regulation strategies, cognitive reappraisal and expressive suppression, in association between ACEs and BPD among young adults.

Background
BPD is primarily marked by emotional instability, interpersonal difficulties, identity diffusion and dysphoria, and increased suicidal and non-suicidal self-injurious behaviours (APA, 2013). BPD symptoms typically emerge during or begin to cause great distress by young adulthood (Chen et al., 2012; Stepp et al., 2013).

Adverse childhood experiences (ACEs), also known as childhood traumas, such as emotional neglect and physical abuse, have been strongly associated with later symptoms of BPD (Frisa et al., 2016; Mersky et al., 2013). Yet, this relationship is not universal; many young adults who experience ACEs do not go on to develop BPD (Ball & Links, 2009).

Emotion regulation often comes in the form of conscious and unconscious strategies to help individuals experience and express emotions, aid in interpersonal functioning, and increase personal well-being (Gross & John, 2003). Emotional regulation strategies can be broadly delineated into two category types: antecedent-focused (e.g., expressive suppression) and response-focused (e.g., cognitive reappraisal). Emotion regulation skills may act conditionally in a way that either makes exposure to early adversity more or less related to later symptoms of BPD.

Hypotheses
H1: Expressive suppression will modify the relationship between the exposure to general childhood trauma and symptoms of BPD. Exposure to greater adversity will be associated with greater BPD symptom endorsement at higher levels of suppression.

H2: Higher cognitive reappraisal use will modify the relationship between exposure to general multiple trauma and symptoms of BPD in that higher levels of reappraisal will lead to less endorsement of symptoms of BPD, regardless of exposure to general childhood trauma.

Methods
Adults ages 18 – 25 (N = 172) completed measures in person in an office-setting.

Measures
- Borderline Symptom List – 23 (BSL-23; Bohus et al., 2009)
- Adverse Childhood Experiences (ACE; Dong et al., 2004)
- Emotion Regulation Questionnaire (ERQ; John & Gross, 2003)

Figure 1. Illustration of cognitive reappraisal as a moderator of ACE exposure and BPD symptoms.

Analysis and Results

1. Bivariate relations using SPSS 26 showed significant associations in expected directions.
   - Expressive suppression was positively associated with BPD symptoms.
   - Cognitive Reappraisal was negatively associated with BPD symptoms.

2. Multiple linear regression analyses assessed moderating interactions using PROCESS macro v. 3.5 (model 2; Hayes, 2018) via SPSS 26.
   - ACEs categorized into 3 groups: no exposure, 1 exposure, 2 or more exposures
   - Expressive suppression was not a significant moderator in any interaction and dropped from the model.

   Table 1. Standardized coefficients for regression analyses examining cognitive reappraisal between ACE exposure and BPD symptoms.

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<th>b</th>
<th>SE</th>
<th>t</th>
<th>p</th>
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<td>0.21</td>
<td>0.72</td>
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<td>-0.92</td>
<td>0.27</td>
<td>-3.39</td>
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Discussion
Major findings:
- Cognitive reappraisal acts as an overall moderator between individuals with multiple ACE exposures and BPD symptoms; cognitive reappraisal acts as a buffer even at average levels.
- Low levels of cognitive reappraisal were associated with higher endorsement of BPD symptoms in individuals with multiple ACE exposures (see Figure 1).
- A non-significant trend suggests high levels of cognitive reappraisal were associated with decreased BPD symptoms, despite multiple ACE exposures.

Implications
- Cognitive reappraisal may be an ER strategy that would be of particular importance for young adults who have experienced multiple ACEs.
- Cognitive reappraisal can be targeted for intervention.
- Early intervention which focuses on cognitive reappraisal for individuals at risk of developing BPD might ameliorate future psychopathology.

References