Moderating Role of Callous Unemotional Traits on the Relationship Between Violence Exposure and Psychosocial Dysfunction in Ethnic Minority Youths

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Background

• 1 in 4 US children are exposed to violence through their home or community each year (Finkelhor et al., 2013)
• Children exposed to violence and/or child abuse are more likely to experience a wide range of adverse psychosocial and behavioral outcomes, particularly conduct and peer relationship problems (Caputo et al., 1999; Chen et al., 2016; Herrenkohl et al., 2008)
• Violence exposure (VE) (Flowers, Hastings, & Kelley, 2000) can be divided into three types:
  - Physical/verbal abuse (maltreatment);
  - Traumatic violence: Serious violent events that occur either to the child or child is a direct witness
  - Indirect violence: witnessing less severe interpersonal violence or hearing about violent events

Aim 1: Do distinct subtypes of violence exposure relate differentially to conduct problems, peer relationships, and emotional problems in youths?

Hypothesis 1: Increased traumatic violence exposure frequency will be related to more emotional and peer relationship problems in youths.

Hypothesis 2: Increased indirect violence exposure frequency will relate to more conduct problems in youths.

Hypothesis 3: Increased maltreatment exposure frequency will be related to more conduct, emotional, and peer relationship problems in youths.

Aim 2: Do CU traits moderate relationships between distinct forms of violence exposure and higher severity conduct, peer relationships, and emotional problems in youths?

Hypothesis 1: CU traits will strengthen the relationship between increased violence exposure and conduct problems.

Hypothesis 2: CU traits will strengthen the relationship between increased violence exposure and peer relationship problems.

Hypothesis 3: CU traits will weaken the relationship between increased violence exposure and emotional problems.

Methods

Participants

• 60 youths participating in a community-based enrichment program (Ages 5–17, M_age=11.07; SD=2.82)
• 71.2% male, 94.8% Black, 1.7% White, 3.4% Biracial

Measures

Violence Exposure: KID-Screen for Adolescent Violence Exposure (KID-SAVE); (Flowers, Hastings, & Kelley, 2000); 3 subscales: Traumatic violence, Indirect violence, Physical/verbal abuse
Psychosocial Dysfunction: Strengths and Difficulties Questionnaire – Youth Version (SDQ-Y); (Goodman, Meltzer, & Bailey, 1996)
3 subscales: Conduct Problems, Emotional Problems, Peer Relationship Problems

Callous Unemotional Traits: Antisocial Process Screening Device-Youth (ASPD-Y); (Frick & Hare, 2001)
1 subscale: Callous unemotional traits

Analytic Strategy

• Linear multiple regression
• IVs: Violence Exposure Frequency (3 types)
• Moderator: CU Trait Severity
• DVs: Conduct Problems, Peer Relationships, Emotional Problems

Aims & Hypotheses

Analytical Strategy

Table 2: Predictors of psychosocial dysfunction severity using multiple regression

<table>
<thead>
<tr>
<th>Predictors</th>
<th>β</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect Violence</td>
<td>0.04</td>
<td>0.05</td>
<td>0.79</td>
</tr>
<tr>
<td>CU Traits</td>
<td>0.05</td>
<td>0.06</td>
<td>0.88</td>
</tr>
<tr>
<td>Traumatic Violence</td>
<td>0.03</td>
<td>0.06</td>
<td>0.49</td>
</tr>
<tr>
<td>Maltreatment</td>
<td>0.02</td>
<td>0.06</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Table 3: Simple slopes analysis for significant interactions

<table>
<thead>
<tr>
<th>Peer Relationship Problems</th>
<th>Low CU Traits</th>
<th>Average CU Traits</th>
<th>High CU Traits</th>
<th>β</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect Violence Exposure</td>
<td>-0.02</td>
<td>0.03</td>
<td>-0.68</td>
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</tbody>
</table>

Table 1: Correlations Among Variables

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Indirect Violence Exposure</td>
<td>0.59**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2 Traumatic Violence Exposure</td>
<td>-0.05</td>
<td></td>
<td></td>
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<tr>
<td>3 Maltreatment Violence Exposure</td>
<td>0.00</td>
<td></td>
<td></td>
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<tr>
<td>4 Callous Unemotional Traits Total</td>
<td>0.09</td>
<td></td>
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<tr>
<td>5 Total Conduct Problems</td>
<td>0.12</td>
<td></td>
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<tr>
<td>6 Total Emotional Problems</td>
<td>0.00</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>7 Total Peer Relationship Problems</td>
<td>-0.22</td>
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</table>

Conclusion & Discussion

• For AIM 1, zero order correlations and subsequent regressions did not reveal hypothesized relationships for each type of violence exposure.
• Instead, zero-order correlations indicated that most forms of violence exposure correlate with conduct problems but less so with other psychosocial problems in this sample.
• Our results also contradicted original hypothesis that due to the unemotionality associated with CU traits, emotional problems would be less frequent in those higher on CU traits. Instead, CU traits and emotional problems were positively correlated (more so than with conduct problems).
• For AIM 2, two cross-over interactions indicated that violence exposure was related differently with emotional problems and peer relationships for youths scoring higher vs lower on CU traits.
• Indirect violence exposure was negatively associated with peer problems when CU scores are low but was non-significantly positively related when CU traits were high.
• Results were the opposite for emotional problems, with maltreatment exposure related to higher emotional problems at low CU and fewer emotional problems at high CU, which would fit with our hypotheses.
• Further research is needed to examine interactions between CU traits and violence exposure, particularly in underrepresented samples like the current one.

Limitations:

• Sample size was small for intended analyses (N=60)
• Cross sectional design; future studies should aim to collect longitudinal data to examine the potential causal relationship between violence exposure type and psychosocial dysfunction
• Due to multiple testing, some findings may be spurious; replication is needed.