Identifying Sources of Heterogeneity in the Associations Between Children's Affect-Biased Attention and CU Trait Development: The Moderating Role of Emotion Understanding

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Aim

Examine whether children's emotion understanding moderates the relationship between their affect attention bias and CU trait development two years later

Introduction

Limited work has been dedicated to identifying antecedents of callous-unemotional (CU) trait development in children.

- Current research provides mixed reports on the associations between children's affect-biased attention and CU traits using primarily cross-sectional designs
  (Dadds et al., 2006; Dadds et al., 2008; Ciucci et al., 2018; Billeci et al., 2019)
- Children's understanding of emotions may help to explain the variations in this association
  (Blair & Cole, 2000; Dawel et al., 2012)
- Two viable forms of moderation:
  - Dual Risk Model
  - Vulnerable-stable Model
  (Luthar et al., 2000)

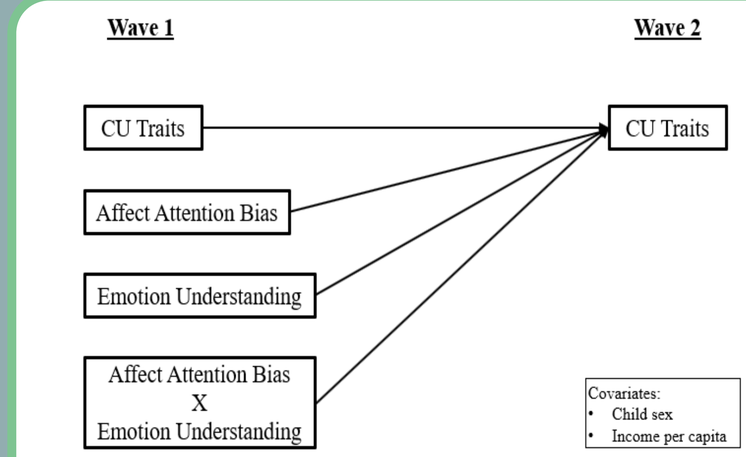
Participants

Sample
- 239 children and their families
- 52% female
- *M*age at W1 = 4.4 years

Ethnicity/Race
- 68% White
- 18% Black
- 10% Multi-racial
- 4% Another race

Socio-economic Status
- Median income: $72,000/year
- 32% received public assistance

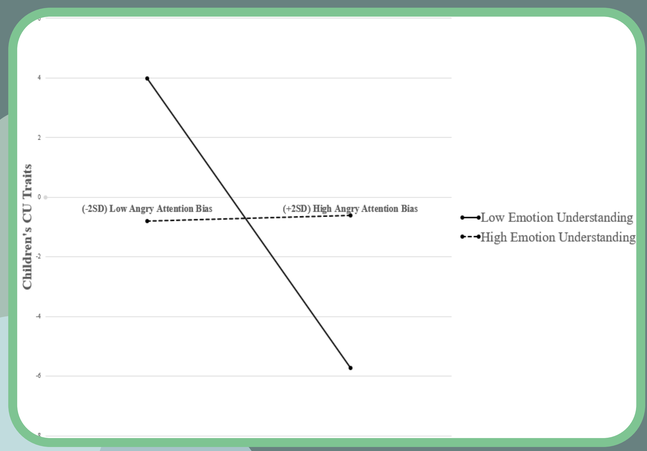
Conceptual depiction of pathway model used to examine the moderating role of children's emotion understanding on the prospective association of children's affect attention bias predicting residualized change in their later CU traits



Separate models were conducted for each of the three emotions (e.g., angry, happy, sad) measured for affect attention bias

Methods

Construct	Method	Reporter	Wave	Measure Description
Affect Attention Bias	Eye Tracking	Child	1	Passive Viewing Quadrant Task (Harrison & Gibb, 2015)
Emotion Understanding (Composite score)	Facial Recognition	Child	1	Morphed Faces Task (Gibb et al., 2009)
	Facial Recognition	Child	1	ACEE (Izard et al., 2001)
CU Traits	Survey	Mother	1 & 2	ICU (Frick, 2004)



Graphical plot of the interaction between children's angry attention bias and their emotion understanding predicting children's CU traits 2 years later

Results

- Prospective association between children's affect-biased attention for all three emotions and residualized changes in children's CU traits over two years was significantly moderated by their emotion understanding abilities (βs = .17-.21, *p*s < .001)
- All three interactions displayed the same cross-over pattern

Conclusions

- Graphical plots and follow-up analyses revealed that the **interactions did not support either of the two proposed forms of moderation**
  (Del Giudice, 2017)
- All three interactions suggest **low emotion understanding as a sensitivity factor**
  - Children with poor emotion understanding exhibited substantially lower levels of CU traits when they displayed higher levels of attention to emotions compared to children with high levels of emotion understanding
- Children with poor emotion understanding might benefit the most from programs focused on specifically improving children's attention and encoding of emotions

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