

# Children's Empathic Sensitivity is Associated with Low Internalizing Problems Except in Children with Excessive Interpersonal Guilt

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## Introduction:

- Although empathy has been associated with psychosocial benefits, empathic sensitivity may not offer protective benefits in dysregulated children, such as children prone to excessive guilt (Tone & Tully, 2014).
- Positive empathy is not often studied but appears to be particularly key to understanding internalizing problems in high-risk children (Tully & Donohue, 2017).
- Therefore, the current study tests whether the association between high empathy and low internalizing problems is absent in children

## Hypothesis:

- We hypothesized that children's empathic sensitivity would be associated with lower internalizing problems in children with lower levels of excessive guilt, while children's empathic sensitivity would not be associated with internalizing problems in children with higher levels of excessive guilt.

## Methods:

- 117 children (50% female,  $M_{age}=9.18$ ,  $SD = 1.11$  years) and one parent (98% mothers)
  - White/Non-Hispanic=56.4%
  - Black/African American=36.8%
  - Multiracial=4.3%
  - Hispanic=1.7%
  - Asian =0.9%
- Child rating scales:
  - *Inappropriate and Excessive Guilt Scale (IEGS)* - a 24-item self-report measure with three possible responses ("not at all," "a little," "a lot") to statements about what the participant would think and feel in potentially guilt-inducing situations.
  - *Child Hope Scale (CHS)* – self-report measure with six sentences regarding children's views of themselves and their futures.
  - *Penn State Worry Questionnaire – Child (PSWQ-C)* - a self-report measure with 14-items and four possible responses (never true, sometimes true, most times true, and always true) to statements describing various types of worrying behaviors.

- *Children's Depression Inventory–2, short (CDI-2)* - a 12-item self-report measure of children's depression symptoms where subjects select one of three possible responses to best depict their feelings or thoughts over the past 12 weeks.
- *Self-Assessment Manikin (SAM)* – 9-point pictorial rating scale to assess empathic happiness and sadness after watching videos of children experiencing sad and happy events. Three different one-minute-long videos were used in both the happy and sad paradigms.
- *Parent rating scales measuring children's empathy:*
  - *Dispositional Positive Empathy Scale (DPES)* - Parents use a rating scale of 1 (really untrue) to 4 (really true) to 7 statements of how one's child's feels and responds to others' happiness.
  - *Griffith Empathy Scale (GEM)* – Parents use a rating scale ranging from strongly disagree to strongly agree to 23 descriptions of how one's child responds to others' experiences.

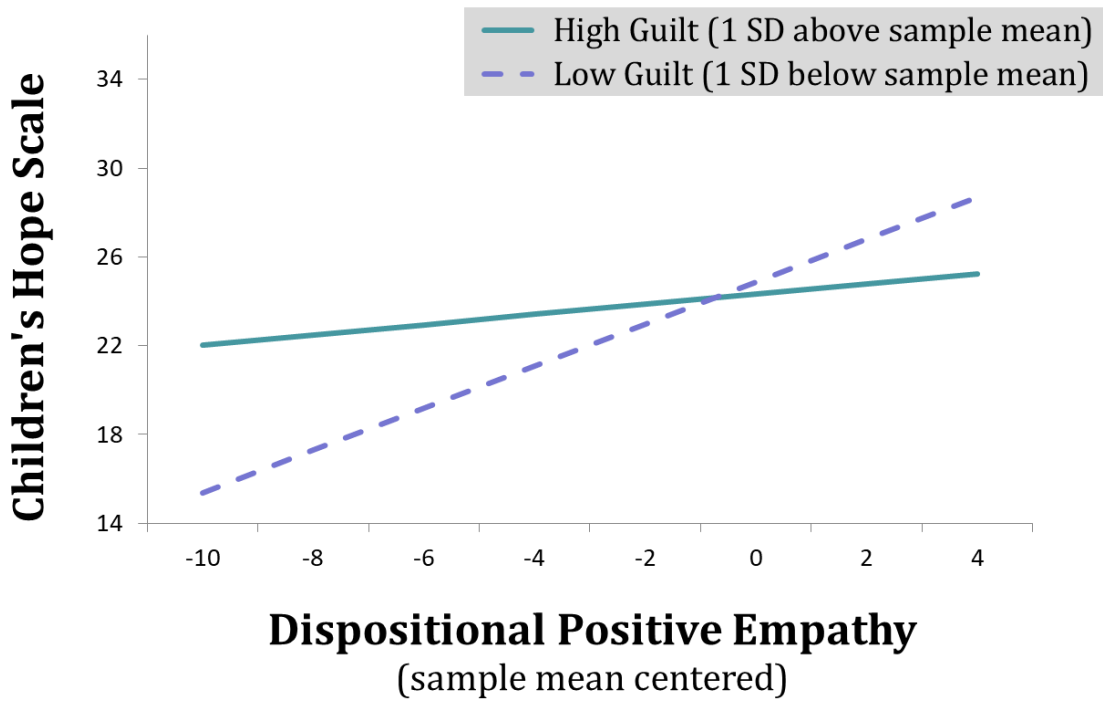
## **Results:**

- Children's guilt moderated associations between parent-reported positive and negative empathy and internalizing problems (Figure 1).
  - In children with low guilt, higher levels of positive and negative empathy were associated with lower internalizing problems and higher hopefulness.
  - In children with high guilt, these associations were not significant.
- Children's guilt did not moderate associations between child-reported empathy and internalizing problems. Main effects were significant. Specifically:
  - Higher empathic happiness was associated with higher hopefulness and lower depression and worry (Figure 2).
  - Higher empathic sadness was associated with higher hopefulness.

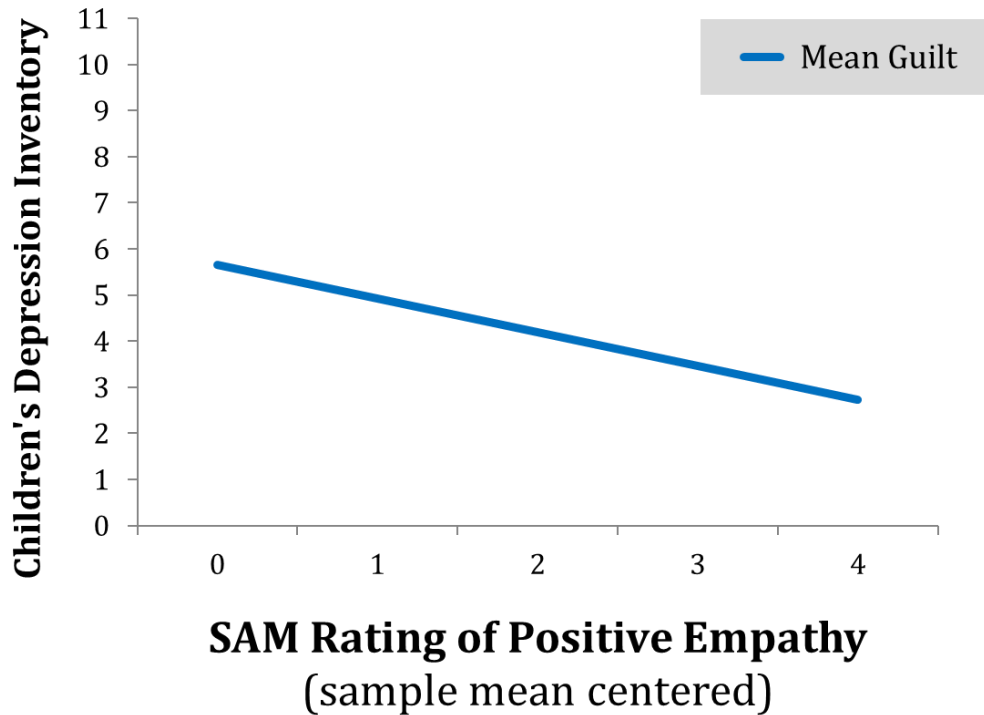
**Table 1.** Regression betas for associations between empathy and internalizing problems differentiated by guilt ratings

Internalizing Problems	Empathy Measures			
	Child-Report		Parent-Report	
	Pos (SAM)	Neg (SAM)	Pos (DPES)	Neg (GEM)
<b>Depression (CDI)</b>				
High Guilt	-.30 *	-.12	< .01	-.05
Low Guilt	-.37**	.16	-.55***	-.40**
<b>Worry (PSWQ)</b>				
High Guilt	-.40**	.23	-.10	-.11
Low Guilt	-.02	-.01	-.28*	-.10
<b>Hopefulness (CHS)</b>				
High Guilt	.58***	-.14	.14	.10
Low Guilt	.52***	-.29	.57***	.46***

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



*Figure 1.* Example of guilt moderating the association between parent-reported empathy and internalizing problems.



*Figure 2.* Example of main effect associations between child-reported empathy and children's internalizing problems.

**Discussion:**

- Our findings support our predictions that empathic sensitivity is:
  - Protective against internalizing problems in children with low guilt.
  - Not protective against internalizing problems in children with excessive guilt.
- Guilt was a significant moderator when using parent-reported but not child-reported empathy.
  - This may be due to using child ratings of empathy when viewing videos of children and parent ratings of empathy during actual interactions.
- The findings also align with recent research suggesting that in low risk contexts, children with greater positive empathy are at lower risk for internalizing problems.
- Efforts to mitigate the development of internalizing problems may be improved by fostering empathic sadness and empathic happiness in children while also teaching appropriate interpersonal responsibility.

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### **References:**

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