

## Objective

Children with leukemia recurrently have to undergo lumbar & bone marrow punctures, often described as more painful than cancer itself. Although parental response to child pain influence the child's pain experience, little attention has been paid to parental experience of these painful procedures. Specifically, parental protective or attending behavior is generally related to more child distress & pain. However, it is largely unknown why parents engage in particular patterns of behavior in response to child pain.

*This study investigated whether parental catastrophic thoughts about their child's pain are associated with parental feelings of distress and how these, in turn, translate into parental behaviors.*

## Method

### Participants:

46 parents (35♀, 11♂,  $M_{age} = 27.69$ ,  $SD_{age} = 6.31$ ) of children with acute leukemia (19♀, 27♂,  $M_{age} = 6.69$ ,  $SD_{age} = 4.18$ ) undergoing a lumbar or bone marrow puncture

### Procedure:

*Before the puncture:* PCS-P state & pain-attending behavior

Parents needed to leave the room during the puncture.

*After the puncture:* parental distress & pain-attending behavior

### Measures:

SR parental catastrophizing about child puncture-pain → PCS-P state

SR parental distress → 4 emotional adjectives (worried, upset,...)

observed parental verbal and non-verbal pain-attending behavior

↳ adaptation of the CAMPIS-R

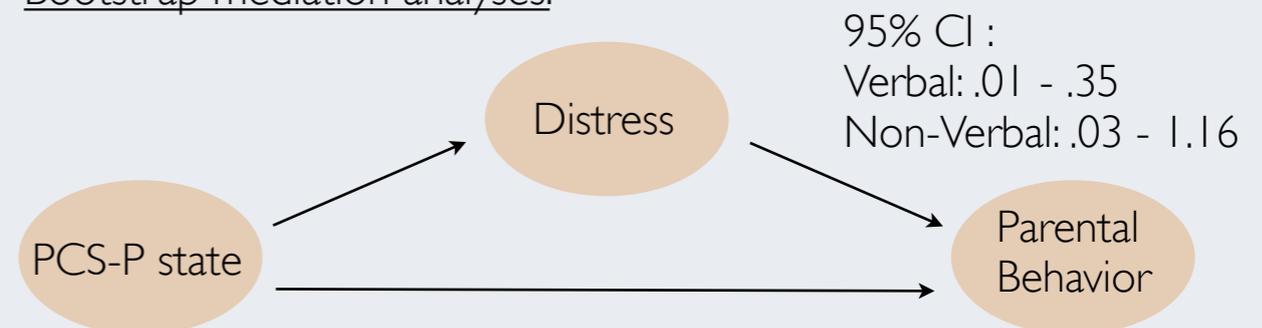
## Results

### hierarchical linear regression:

- parents highly catastrophizing about puncture-pain experience more distress ( $\beta = .57$ ;  $t = 4.30$ ,  $p < .001$ )

- heightened feelings of parental distress is related to more parental pain-attending behavior *after the puncture* (verbal:  $\beta = .31$ ;  $t = 2.05$ ,  $p < .05$  / non-verbal:  $\beta = .34$ ;  $t = 2.33$ ,  $p < .05$ )

### Bootstrap mediation analyses:



## Conclusion

The findings suggest the importance of taking into account parental catastrophizing when explaining parental emotional responses to child pain, which in turn translate into parental behavior attending to the pain their child has experienced.

Regulating parental distress may therefore be important to alter parental behavior toward their child's pain.

Longitudinal studies are needed to explore whether these relations maintain during the course of the treatment and how these parental responses influence the child's pain experience.