

Children's Procedural Anxiety in a Pediatric Emergency Department among Different Ethnic Populations



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Background

- Invasive, painful procedures are common in the pediatric emergency department (ED) and often associated with significant distress.¹⁻³
- Current literature demonstrates that distress surrounding invasive procedures in children is associated with pain and adverse outcomes; however, most of this literature focuses on non-Latino/x White patients.^{1,4}
- Healthcare and treatment disparities have been recognized in both pediatric and adult literature citing that Latino/x children are at a greater risk for experiencing healthcare disparities.⁵⁻⁷

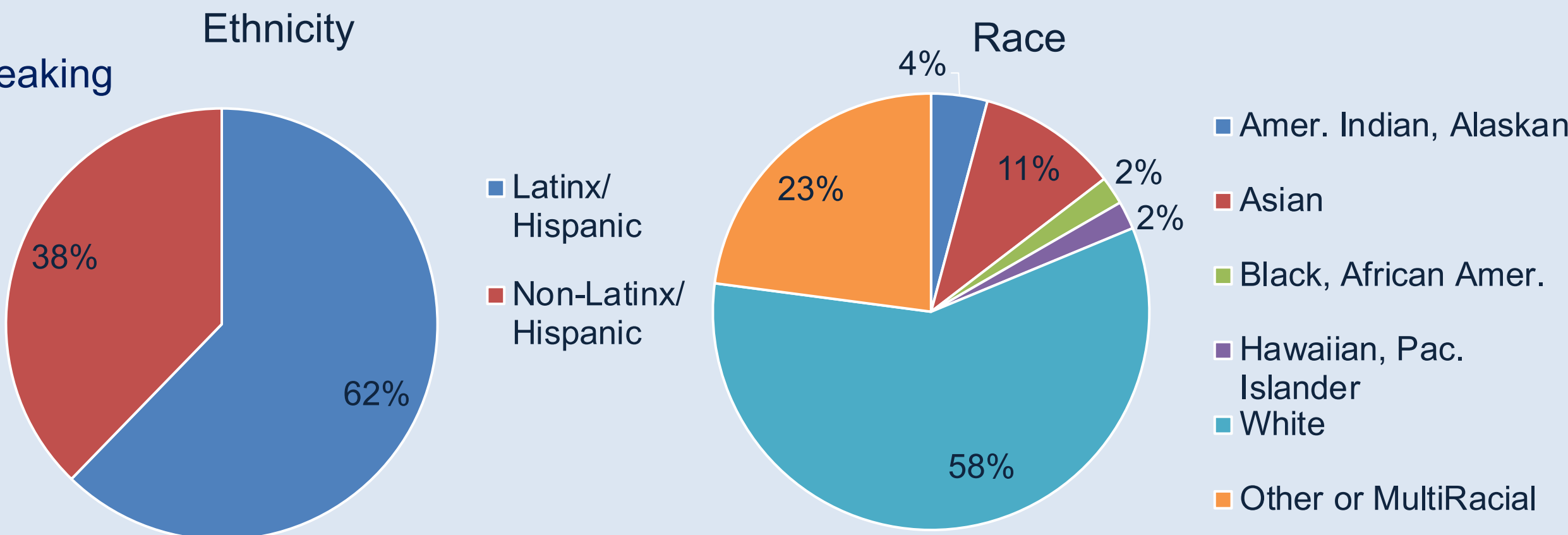
Study Aims

- Examine the effects of previous medical anxiety, trait anxiety and demographic factors on pre-procedural anxiety in an ethnically diverse pediatric sample presenting to a pediatric ED for invasive, painful procedures.



Sample Characteristics

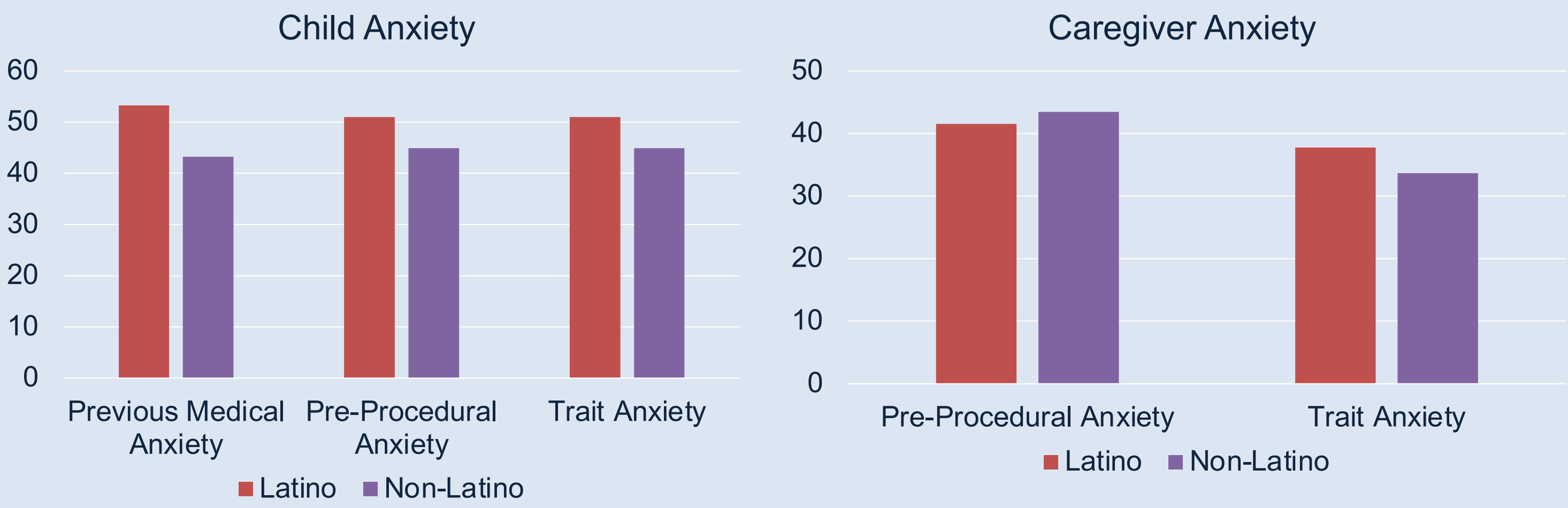
- Child mean : 5.62 (.42) years
- 45.5% female
- 12.5% were Spanish speaking



Results

- Child and caregiver anxiety did not differ by ethnicity. Spanish speaking children and caregivers reported higher trait anxiety ($t=-2.45$, $p=.021$; $t=-5.70$, $p<.001$). No other demographic factors had an effect on child or caregiver anxiety.
- Child pre-procedural anxiety was positively associated with previous medical anxiety ($r=.35$, $p=.02$) and caregiver state anxiety ($r=.53$, $p<.001$) Table 1.
- In regression analyses, previous medical anxiety and caregiver pre-procedural anxiety were significant predictors of child pre-procedural anxiety (see Table 2). This association was not moderated by ethnicity nor language.

Anxiety by Ethnicity



Anxiety by Language

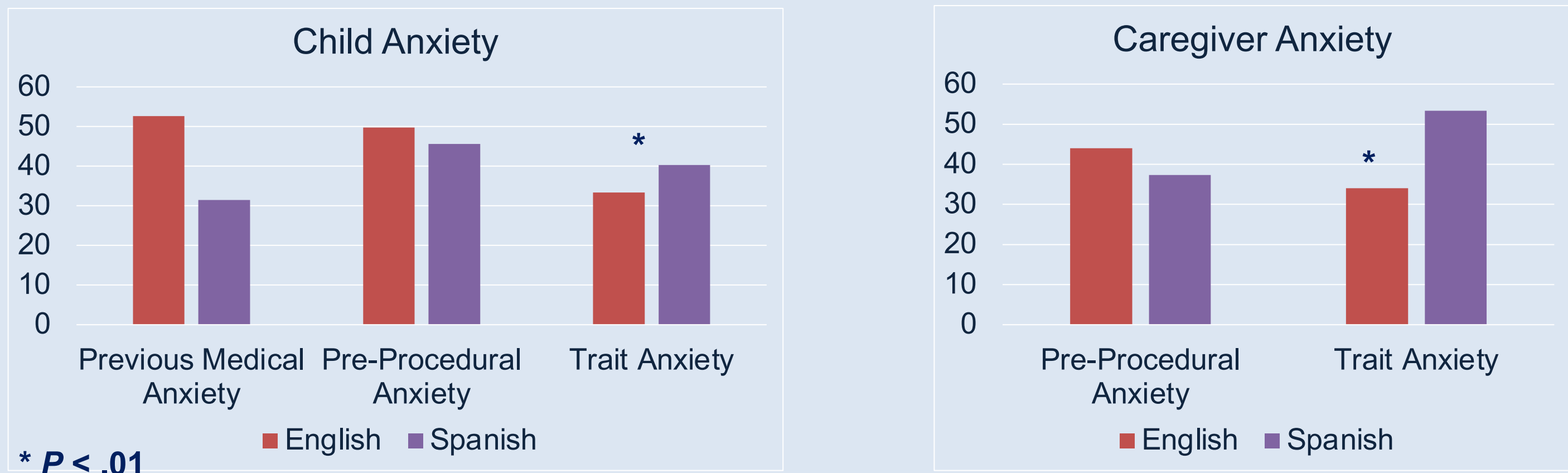


Table 1. Correlational Analyses	1	2	3	4
1. Child Pre-Procedural Anxiety				
2. Child Previous Medical Anxiety	.35*			
3. Caregiver Pre-Procedural Anxiety	.52**	.33*		
4. Child Trait Anxiety	-.21	-.26	-.04	
5. Caregiver Trait Anxiety	.13	.10	.14	.27

Table 2. Regression Analyses	B	95% CI	SE	t	p-value
(Constant)	20.14	3.43-36.85	8.25	2.44	0.02
Child previous medical anxiety	0.28	0.02-.54	0.13	2.18	0.04
Caregiver Pre-Procedural Anxiety	0.35	0.05-.64	0.15	2.37	0.02

Methods

Participants:

- 55 parent-child dyads fluent in English or Spanish presenting to a pediatric ED
- Children were 2-12 years old and underwent an invasive procedure (e.g., laceration repair)

Measures:

- Demographic form
- Children's previous medical anxiety and pre-procedural anxiety: Visual analog scale (0=*not anxious* to 100=*very anxious*).⁸⁻⁹ Caregiver's provided proxy-report of child's anxiety.
- Trait Anxiety: State Trait Anxiety Inventory was completed by caregivers and children > 5 years old.¹⁰⁻¹¹

Procedures:

- Participants were recruited after triage and completed study measures prior to the ED procedure.

Analyses:

- Mean difference, correlation, and regression analyses were conducted.

Conclusions

- Children and caregivers presenting to the ED reported moderate levels of pre-procedural anxiety.
- Spanish speaking children and caregivers reported significantly higher trait anxiety compared to participants fluent in English, but trait anxiety was not associated with pre-procedural anxiety.
- Child previous medical anxiety and caregiver pre-procedural anxiety were both unique predictors of child pre-procedural anxiety in the ED.
- Future work will include a larger sample size and build on these results to examine broader sociocultural and healthcare system factors associated with ED anxiety within and across diverse pediatric populations undergoing invasive procedures in the ED.
- Current results suggest that administering two, one-item measures to children and caregivers presenting to the ED may help identify patients at-risk for higher pre-procedural anxiety, which help target treatment to reduce distress surrounding painful procedures.

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