

Parental Toxic Stress and Childhood Psychosocial Functioning

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BACKGROUND

- Prolonged activation of physiologic stress response occurs when children are exposed to physical, emotional or verbal abuse, neglect, and/or household dysfunction. These events are known as adverse childhood experiences (ACEs).
- Toxic stress can lead to permanent changes in brain's architecture during infancy and early childhood; can lead to chronic physical and mental health conditions.
- Adults with ACEs may demonstrate limited parenting skills and maladaptive responses to their children which affects children's emotional and behavioral health.
- Pediatrics Symptoms Checklist (PSC) is a screening tool which aids in the detection of psychosocial dysfunction in children. It screens for internalizing, externalizing, and attention-related behavior symptoms.
- A positive PSC triggers a diagnostic evaluation for mental health conditions.

OBJECTIVE

To determine if there is a correlation between parental ACE scores and the likelihood of a positive PSC-17 screen in their children.

METHODS

Cross-sectional convenience sample study in three university-affiliated community health clinics in the Bronx. Caregivers of children ages 4-16 at well visits completed an ACEs screen about themselves and a PSC-17 for their child.

RESULTS

Table 1. PSC-17 scores (n=71)

	Positive screen (%)	Negative screen (%)	P Value
Total ACEs	5.6	94.4	0.021
Internalizing symptoms	5.6	94.3	0.002
Externalizing symptoms	2.8	97.2	0.010
Attention Symptoms	11.3	88.7	NS

Figure 1. Sample ACEs questionnaire

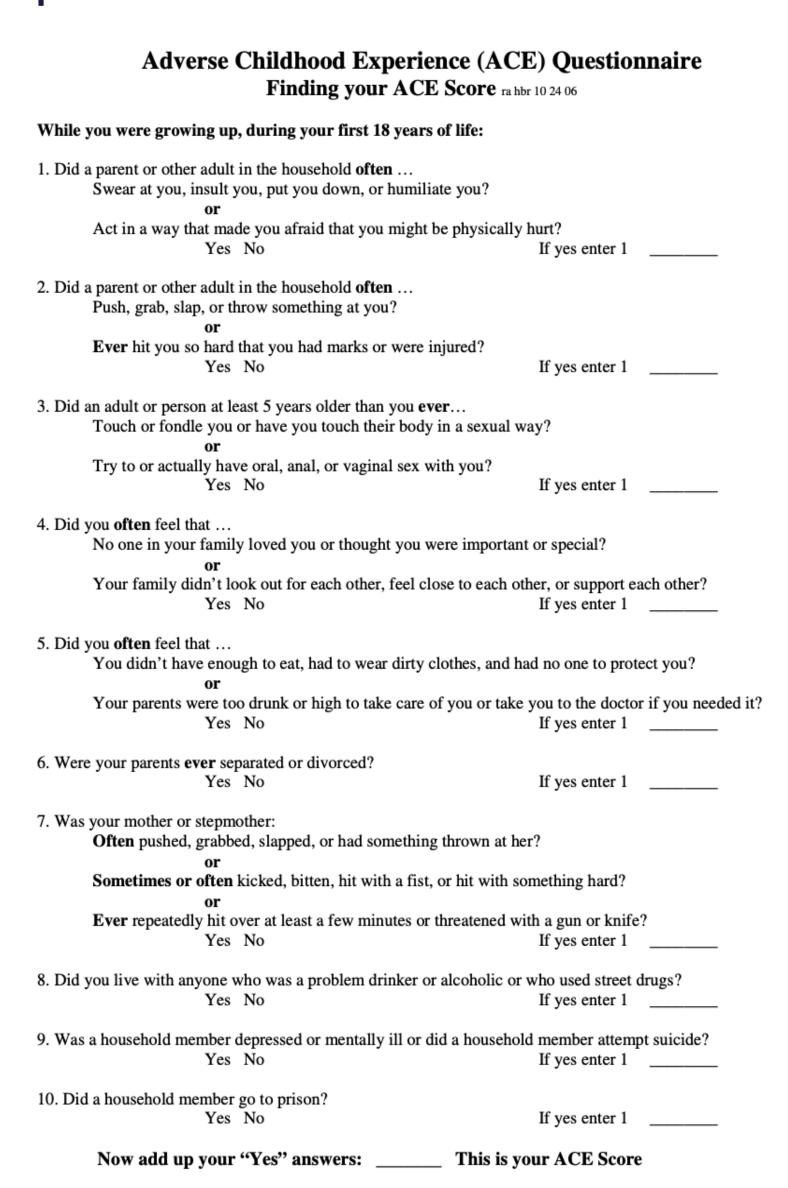


Figure 2. Sample PSC-17 questionnaire

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RESULTS

- 71 caregivers of children ages 4-16 years participated in the study.
- Significant relationship between caregivers with higher ACE scores and an overall positive PSC-17 and positive internalizing and externalizing subsets in their children.
- No significant correlation between parental ACEs and a positive attention subset.

CONCLUSION/LIMITATIONS

- ACEs in primary caregivers correlate with a positive screen for behavior problems in their children. Based on these findings, primary care practitioners should consider using PSC-17 as an initial screening tool at well child visits in communities where ACEs are prevalent to detect pediatric mental health disorders and initiate treatment.
- Limitations to this study: single-center study with convenience sample.

REFERENCES

- "About the CDC-Kaiser ACE Study." Centers for Disease Control and Prevention. www.cdc.gov/violenceprevention/acestudy/ab out.html.
- Shonkoff, J. P., et al. "The Lifelong Effects of Early Childhood Adversity and Toxic Stress." Pediatrics, vol. 129, no. 1, 2011, doi:10.1542/peds.2011-2663.
- ACEs and the Lifelong Consequences of Trauma. www.aap.org/enus/Documents/ttb_aces_consequences.pdf.