



# Beyond the ACE Score:

## Perspectives from the NCTSN on Child Trauma and Adversity Screening and Impact

### KEY POINTS

#### Background:

- The ACE Study<sup>1</sup> deepened our understanding of the relationship between child trauma, adversity, and negative long-term physical and mental health outcomes.
- As awareness of ACEs increased, so has use of the 10-item ACE Study survey list to conduct risk screening for children usually to generate an “ACE score” (i.e., the total number of specific types of traumas and adversities a person reports having experienced).
- The ACE score approach does not capture the frequency, severity, duration, or developmental timing of exposure to such events, and excludes other common traumas and adversities (e.g., traumatic bereavement, medical trauma, natural disasters, racial trauma, community violence, and more).
- The ACE Study was designed as a retrospective epidemiological survey for adults and not as a comprehensive mental health screening tool for use with adults or children. One of the authors of the instrument now cautions against its use as a tool for risk screening or intervention and service planning for individuals.<sup>2</sup>

#### Considerations:

- **Terms Overlap but are not Interchangeable.**
  - ◆ “ACEs”, “adversity”, and “trauma” are all terms that describe bad things that may happen to children. Distinguishing between “trauma” and “adversity” is important for children’s care.
  - ◆ Children who experience trauma may have reactions that require trauma-focused treatment and caregiver support. Non-traumatic adversities (e.g., divorce, an incarcerated parent) may also lead to mental health consequences (e.g., depression, anxiety, behavior problems), but treatment needs will vary according to the child’s symptoms, distress, functioning, and caregiver response.
- **Scoring and Screening.**
  - ◆ Sometimes those who use the ACE Study checklist for screening/assessment have added one or two adversities and trauma types to address a particular type of childhood experience, leading to multiple versions of ACEs tools and to confusion and lack of standardization across surveys and research studies. This has led to ACE scores that cannot be fully understood (e.g., does the ACE score refer

<sup>1</sup>ACEs refers to the original 10-item questionnaire from the 1998 Felitti and Anda study. Those items were: 1) physical abuse, 2) sexual abuse 3) emotional abuse, 4) physical neglect, or 5) emotional neglect, 6) violence against the mother, 7) household member who were substance abusers, 8) household member who had a mental illness or were suicidal, 9) household member ever been imprisoned, and 10) losing a parent to separation or divorce.

to the original 10 items or to other items, and if it is broader, which traumas and adversities were included, or left out, and why?

- ◆ Adding up ACEs to create an ACE score is not sufficient to generate an understanding of a child's exposure to trauma and adversities because it does not capture the intensity, frequency, or duration of exposure to any traumatic or adverse event nor measure children's reactions to adversity, including distress symptoms.
- ◆ ACEs checklist scores reflect only the number of different *types* of adverse experiences, not the number of exposures. Children with chronic traumas or multiple traumas of the same type may create the false impression of a "low score."
- ◆ An ACE score should not be used to determine a child's risk for poor lifetime outcomes, nor the specific clinical and service needs of children who experience trauma and adversity.

#### ■ **Not all ACEs are Created Equal.**

- ◆ Some ACEs are more potent than others (i.e., certain traumatic and adverse events have a greater impact on physical and mental health outcomes than others).
- ◆ ACEs should not be considered as having equal impact with each other, nor should their effects be considered to occur without the context of age, life circumstances, prior history, availability of support, and other protective factors.
- ◆ When combined, certain pairs of traumas and adversities interact to have a greater effect.<sup>3</sup> For example, sexual abuse—when experienced with physical abuse, neglect, or domestic violence—significantly increases the risk for serious behavioral problems.<sup>4</sup>
- ◆ Simply adding the number of adverse childhood experiences into an ACE score masks these interactions that should be considered to provide appropriate care.

#### ■ **Trauma Exposure Interacts Significantly with Child Development.**

- ◆ Development can determine how well a child understands or reacts to a traumatic event, and traumatic events may disrupt a child's typical development, particularly when the trauma occurs within the family.
- ◆ Some traumas are more likely to occur during different developmental periods and their impact may be different too.
  - For example, caregiver impairment, neglect, domestic violence, emotional abuse, and physical abuse are the top five most frequently occurring traumatic events in the lives of children ages 0-5.<sup>5</sup> In adolescence, rape and criminal assault are highly prevalent.
  - Risk screening should be informed by the understanding that traumas and adversities have different impacts depending on the age and developmental stage of the child when they occur (e.g., sexual abuse has different consequences at ages 4, 12, and 16), and that certain traumas and adversities are more likely to occur at specific ages and stages of development (e.g., child neglect is most common in children under the age of 3).
- ◆ Different harmful experiences and their consequences may require different interventions. Understanding how traumatic experiences interact with a child's developmental stage is vital for both treatment and prevention.

## ■ Early Intervention and Prevention can Stop Progression of Problems.

- ◆ Intervening variables “intervene” between a child’s first trauma or adversity and potential trauma-related outcomes (i.e., they offer opportunities to prevent any problematic health outcomes reported in the ACE Study).
- ◆ Risk factors like traumatic stress, behavior problems, or depression, and protective factors like supportive adults/friends, comforting routines, etc., may emerge following adverse or traumatic events and influence the likelihood and severity of specific long-term outcomes.
- ◆ To stop progression toward negative outcomes, providers should evaluate strengths, protective factors, and positive childhood experiences; enhance protective factors that buffer the impact of traumatic and adverse events; and address negative short-term consequences that may lead to negative outcomes.

### Summary:

- The ACE Study broadened public understanding about the impact of child trauma and adversity on children’s long-term physical and mental health. Although valuable, awareness of ACEs is insufficient to meet the needs of children and families who have experienced trauma and adversity.
- It is important to use a comprehensive approach in the screening, assessment, treatment, and care of children and families who have experienced trauma and adversity.
- Recovery is possible with access to comprehensive, high-quality, evidence-based, and trauma-informed approaches to treatment and intervention.
- Visit the National Child Traumatic Stress Network at [www.nctsn.org](http://www.nctsn.org) for more information.

### Source:

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National Child Traumatic Stress Network

Established by Congress in 2000, the National Child Traumatic Stress Network (NCTSN) brings a singular and comprehensive focus to childhood trauma. NCTSN’s collaboration of frontline providers, researchers, and families is committed to raising the standard of care while increasing access to services. Combining knowledge of child development, expertise in the full range of child traumatic experiences, and dedication to evidence-based practices, the NCTSN changes the course of children’s lives by changing the course of their care.

## References

- <sup>1</sup>Felitti, V. J., Anda, R. F., Nordenberg D., Williamson D. F., Spitz A. M., Edwards V., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*. 14(4), 254-258.
- <sup>2</sup>Anda, R.F., Porter, L.E., & Brown, D.W. (2020). Inside the adverse childhood experience score: strengths, limitations, and misapplications. *American Journal of Preventive Medicine*.000(000), 1-3. <https://doi.org/10.1016/j.amepre.2020.01.009>
- <sup>3</sup>Putnam, T.K., Harris, W.W., & Putnam, F.W. (2013). Synergistic childhood adversities and complex adult psychopathology. *Journal of Traumatic Stress*. 26(4), 435-442. <https://doi.org/10.1002/jts.21833>
- <sup>4</sup>Putnam, F.W., Amaya-Jackson, L., Putnam, K., & Briggs, E.C. (2020). Synergistic adversities and behavioral problems in traumatized children and adolescents. *Child Abuse and Neglect*. 101, 1-10. <https://doi.org/10.1016/j.chiabu.2020.104492>
- <sup>5</sup>U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children’s Bureau. (2013). Child maltreatment 2012. <http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment>