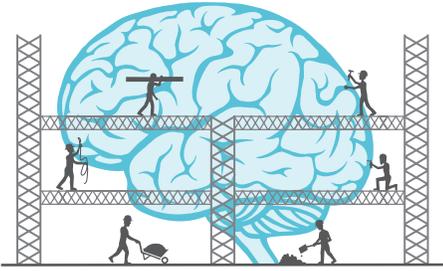


## BUILDING STRONG BRAINS TENNESSEE



### **Addressing Adverse Childhood Experiences: A Case for Attention and Action in Tennessee**

The future prosperity of any society depends on its ability to foster the health and well-being of the next generation. When Tennessee invests wisely in children and families, the next generation will pay that back through a lifetime of productivity and responsible citizenship.

The early years of life matter because the basic architecture of the human brain is constructed through an ongoing process that begins before birth and continues into adulthood. Like the construction of a home, the building process begins with laying the foundation, framing the rooms and wiring the electrical system in a predictable sequence. Early experiences literally shape how the brain gets built, establishing either a sturdy or a fragile foundation for all of the development and behavior that follows. A strong foundation in the early years increases the probability of positive outcomes. A weak foundation increases the odds of later difficulties, and getting things right the first time is easier than trying to fix them later.

The interactive influences of genes and experience shape the developing brain. The active ingredient is the “serve and return” relationships children have with their parents and other caregivers in their family or community. Like the process of serve and return in games such as tennis and volleyball, young children naturally reach out for interaction. This process starts in infancy – with facial expressions and babbling – and continues throughout the early years. If adults do not respond by getting in sync, the child’s learning process is incomplete. This has negative implications for later learning. But when children develop in an environment of relationships that are rich in responsive, back-and-forth interactions, these brain-building experiences establish a sturdy architecture on which future learning is built.

Just as a rope needs every strand to be strong and flexible, child development requires support and experiences that weave many different capacities together. Cognitive, emotional and social capacities are tightly connected in the brain. Language acquisition, for example, relies on hearing, the ability to differentiate sounds, and the ability to pay attention and engage in social interaction. Science therefore directs us away from debating which kinds of skills children need most, and toward the realization that they are all intertwined.

Science also points us to pay attention to factors that can disrupt the developmental periods that are times of intense brain construction, because when this activity is derailed, it can lead to lifelong difficulties in learning, memory and cognitive function. Stress is an important factor to consider. Everyday challenges, like learning to get along with new people or in new environments, set off a temporary stress response that helps children be more alert while learning new skills. But truly adverse childhood experiences – severely negative experiences such as the loss of a parent through illness, death or incarceration; abuse or neglect; or witnessing violence or substance abuse – can lead to a toxic stress response in which the body’s stress systems go on “high alert” and stay there. This haywire stress response releases harmful chemicals into the brain that impair cell growth and make it harder for neurons to form healthy connections, damage the brain’s developing architecture and increase the probability of poor outcomes. This exaggerated stress response also affects health, and is linked to chronic physical diseases such as heart disease and diabetes.

Science tells us that many children's futures are undermined when stress damages the early brain architecture. But the good news is that potentially toxic stressors can be made tolerable if children have access to stable, responsive adults – home visitors, child care providers, teachers, coaches, mentors. The presence of good serve-and-return acts as a physical buffer that lessens the biological impact of severe stress.

The factors children are exposed to affect how well they progress, and communities play a big role. A child's wellbeing is like a scale with two sides; one end can get loaded with positive things, while the other end can get loaded with negative things. Supportive relationships with adults, sound nutrition and quality early learning are all stacked on the positive side. Stressors such as witnessing violence, neglect or other forms of toxic stress are stacked on the other. This dynamic system shows us two ways we can achieve positive child outcomes: to tip to the positive side, we can pile on the positive experiences, or we can offload weights from the negative side. Children who have experienced several ACEs are carrying a heavy negative load, and to tip these children toward the positive, innovative states and communities have been able to design high-quality programs for children to prevent Adverse Childhood Experiences whenever possible, and respond to them with strong, nurturing supports to ameliorate their impact when they can't be prevented. These programs have solved problems in early childhood development and shown significant long-term improvement for children.

As Tennesseans understand the impact of Adverse Childhood Experiences, they will realize the future economic development and prosperity of the state depends on what we do now to prevent these experiences whenever possible and to wrap services around children and families when they can't be prevented. There will be better collaboration across disciplines, departments, agencies and communities, and focus on the infrastructure of services and supports that make a difference. When child abuse and domestic violence prevention, home visiting, mental health and substance abuse services for parents, and a variety of other services and supports are available for early intervention, they put in place a preventive system that improves serve-and-return before it breaks down. This kind of sound investment in our society's future is confirmed by brain science. It improves outcomes for children now, and is a significant foundation for solutions to many of the long-standing and nagging challenges we face as a state in our health, mental health, social services, child protection, and juvenile and criminal justice systems.

All children need someone in their corner. The shift from "What is wrong with you, or why are you a problem?" to "What has happened to you, and how we can we support you and help you overcome these experiences?" will result in a more effective, more empathetic service delivery system and a stronger Tennessee.

*\* Document Use: This document was developed in collaboration with FrameWorks Institute, an organization that "designs, conducts and publishes communications research to prepare nonprofit organizations to expand their constituency base, to build public will, and to further public understanding of specific social issues." The language is meant to be used freely by anyone and doesn't require referencing.*

