

# The Power of Early Childhood

Bruce D. Perry, M.D., Ph.D.



**“We have created an environment where kids are growing up wanting more shiny things and starving for the fundamental core human relational aspects of touch, smile, and a moment spent sitting with someone.”**

**Bruce Perry** is a clinician and researcher focusing on developing practices based upon the emerging concepts of child development and neurodevelopment. Dr. Perry is the Senior Fellow of the ChildTrauma Academy in Houston, Texas and is the author of over 200 journal articles. He has been featured on National Public Radio, “The Oprah Winfrey Show,” “The Today Show,” and “Good Morning America.” Perry was an undergraduate at Stanford University and Amherst College and attended medical and graduate school at Northwestern University, where he earned both M.D. and Ph.D. degrees.

**D**r. Perry, a neuroscientist, described our current society as one on a collision course with biology and nature. “You can fight Mother Nature,” he warned, “but ultimately, you’re going to lose.”

What sets us on this course? First, Dr. Perry described the remarkable malleability of the human brain, based on its ability to modify itself based on repetition and use. During any type of repetition — for example, practicing spelling words — the brain’s neurons are constantly firing, connecting, and weaving themselves together to form new functional connections. This process, Dr. Perry explained, happens over and over, billions of times every day. An active brain makes more of these connections and strengthens them, while in an inactive brain, the connections slowly fade away because of lack of use.

“The brain is the organ of humanity,” Dr. Perry said. “The more we understand about how the brain develops, works, and changes, the better off we’ll be when we design programs, policies, and practices.”

Unfortunately, our current programs, policies, and practices not only disregard what we *do* know about the brain and early childhood development, they are leading to irreparable harm to individuals and society. Unless we change our ways, Dr. Perry predicted, a century from now we will have 25% of families characterized as high-risk, instead of 10%. In one setting after another, we remove children from human relationships and human touch. We keep babies with babies, teenagers with teenagers, and grandparents with other grandparents. “We have created an environment where kids are growing up wanting more shiny things and starving for the fundamental core human relational aspects of touch, smile, and a moment spent sitting with someone.” When we do this, Dr. Perry said, we are doing nothing less than undermining the fundamental nature of our species.

**“We need to figure out how to increase the number and quality of relationships in all children, from high risk to no risk.”**

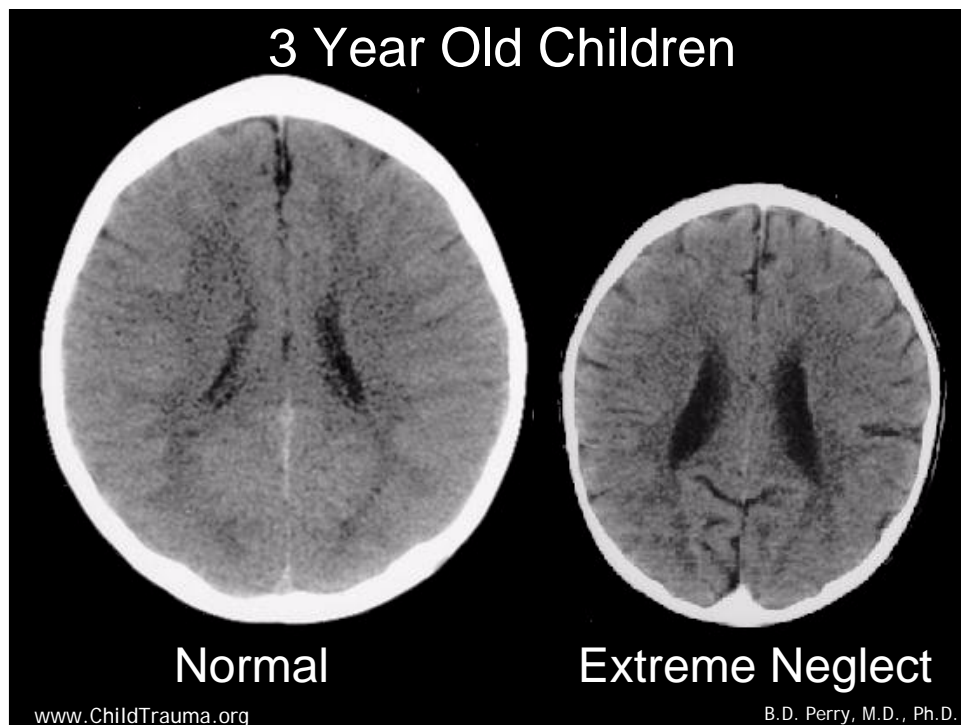
Dr. Perry’s slides showed stark contrasts in the lives of children who had been surrounded with positive human interactions and those who were not. “You don’t become human just because you’re born into the species,” Dr. Perry said, “but because someone was kind with you, held you, and shared.” Alas, many children, materially poor as well as wealthy, suffer from forms of neglect, which Dr. Perry defined as failing to provide “a pattern of developmental experience required to express a fundamental potential.”

These neglectful environments have economic as well as human consequences. Diverting just one of the 300 highest-risk children in Wichita off a terrible trajectory would save \$1 million before the child turns 18.

Despite the dire warnings, Dr. Perry remains an optimist, believing we can choose whether the social fabric in communities is “thin and weak like muslin, or strong as canvas.” To do so, “We need to figure out how to increase the number and quality of relationships in all children, from high risk to no risk,” Dr. Perry said. “The first community and culture that acts on this gift to create consistent, nurturing, safe environments for young families and their children is going to see a huge quantum leap in all kinds of things and recapture 30% of dollars that could be used for the arts, infrastructure, and invention.”

Dr. Bruce Perry and the ChildTrauma Academy release these images for reproduction with the condition that the following accurate descriptive text is used as caption.

- “These images illustrate the negative impact of neglect on the developing brain. The CT scan on the left is from a healthy three year old child with an average head size (50<sup>th</sup> percentile). The image on the right is from a three year old child following severe sensory deprivation neglect since birth. The brain is significantly smaller than average and has abnormal development of cortical, limbic and midbrain structures.”
- **PROPER ATTRIBUTION OF THIS WORK:** “From studies by Bruce D. Perry, M.D., Ph.D. at the ChildTrauma Academy ([www.ChildTrauma.org](http://www.ChildTrauma.org)).





## HOW EXPERIENCES IN EARLY CHILDHOOD CREATE A HEALTHY SOCIETY

The human brain is an amazing and complex organ that allows each of us to think, feel and act. The qualities of humanity which have allowed us to create a democratic government, complex economies, astounding technologies and all other manifestations of our current society are mediated by the human brain.

In turn, these brain systems which allow us to think, feel, and act are shaped by experience. Furthermore, it is increasingly clear that the experiences of childhood act as primary architects of the brain's capabilities throughout the rest of life. These organizing childhood experiences can be consistent, nurturing, structured and enriched - resulting in flexible, responsible, empathic and intelligent contributors to society. Or, all too often, childhood experiences can be neglectful, chaotic, violent and abusive - resulting in impulsive, aggressive, remorseless, and intellectually-impoverished members of society.

One set of experiences will produce tax-payers and one set of experiences will produce tax-consumers.

### WHAT DOES GOVERNMENT NEED TO KNOW ABOUT BRAIN DEVELOPMENT?

- ◆ The brain is undeveloped at birth. During the first three years of life, the brain organizes in a 'use-dependent' way, mirroring the pattern, quality and quantity of the experiences of the infant.
- ◆ The root neurobiological structures for all future functioning are established in early childhood and provide the foundation for more complex feeling, thinking and behaving which develop during the rest of life. Roughly 85 % of these core brain structures are 'organized' by age three.
- ◆ Chaos, neglect and violence in early childhood result in disorganized and under-developed brains.
- ◆ Consistent, nurturing, predictable and 'enriched' experiences in a safe setting result in optimal brain organization and function.

### WHY SHOULD GOVERNMENT BE INVOLVED IN EARLY CHILDHOOD?

- ◆ These are public health issues. Government has already decided that it is in the public interest to aggressively legislate interventions which decrease destructive and expensive health problems such as infectious diseases. Childhood experiences have no less a critical role in determining the health and productivity of the population - and deserve equal standing in public health policy.
- ◆ If programs and policies can increase the percentage of intelligent, empathic, productive members of our society and decrease the percentage requiring special education, mental health, child welfare, child protective and juvenile justice services, it is clearly in the best interests of our society.

### HOW CAN GOVERNMENT HELP CREATE OPTIMAL EXPERIENCES FOR CHILDREN?

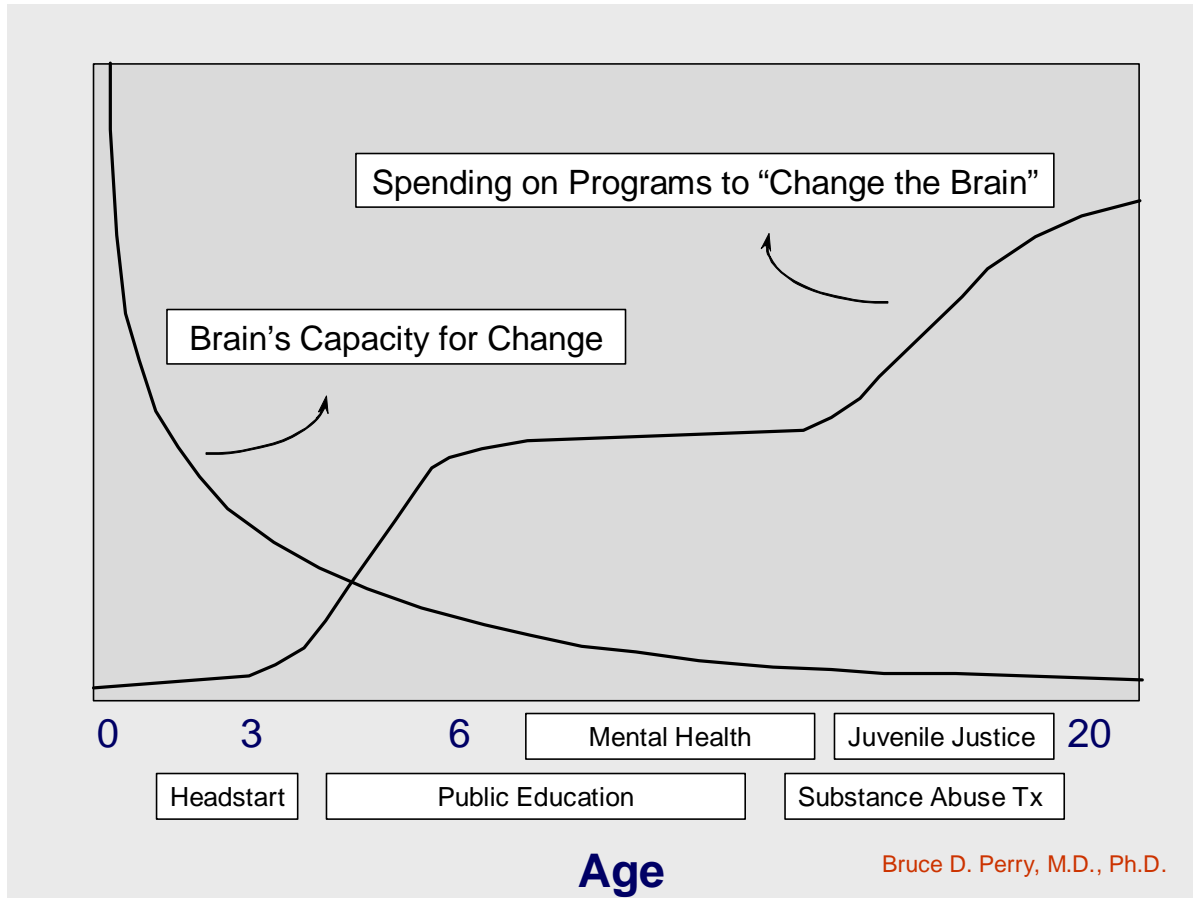
- ◆ Innovative and effective early intervention and enrichment models exist. Find out about them. Integrate them into the policy and practices that exist in your community.
- ◆ Demand and support high standards for day-care, foster care, education and child protective service.
- ◆ Support research in child development and basic neurobiology. With more knowledge will come more efficient and effective programs - for children and adults.
- ◆ The major providers of early childhood experience are parents. Programs to support and strengthen the family will increase the likelihood of optimal childhood experiences.
- ◆ Integrate key principles of child development and caregiving into public education. At present we require more formal education and training for driving cars than for raising children.



*Neglect and abuse during the first three years of life can result in a lifetime of lost potential.*

*Safety, structure, nurturing and enrichment in these first three years can result in a lifetime of productivity.*

## The Mismatch Between Opportunity and Investment



**The ChildTrauma Academy is a unique collaborative of individuals and organizations working to improve the lives of high-risk children through direct service, research and education.**

A major activity of the CTA is to translate emerging findings about the human brain and child development into practical implications for the ways we nurture, protect, enrich, educate and heal children. The "*translational neuroscience*" work of the CTA has resulted in a range of innovative programs in therapeutic, child protection and educational systems.

### **For more information:**

Jana Rosenfelt, M.Ed., LPC  
Director, ChildTrauma Academy  
[JLRosenfelt@ChildTraumaAcademy.org](mailto:JLRosenfelt@ChildTraumaAcademy.org)

### **Web Resources**

[www.ChildTrauma.org](http://www.ChildTrauma.org)  
[www.ChildTraumaAcademy.org](http://www.ChildTraumaAcademy.org)  
[www.ChildTraumaAcademy.com](http://www.ChildTraumaAcademy.com)

5161 San Felipe, Suite 320  
The ChildTrauma Academy  
Houston, TX 77056  
USA