EARLY BRAIN DEVELOPMENT AND CHILDHOOD INSTABILITY

Childhood instability, as defined by the Urban Institute's recent important report on the topic, refers to sudden and involuntary disruptions in a child's life that cause a negative change.[1] Instability can manifest in many overlapping ways. For instance, a child may experience instability from a job loss in the family as well as the subsequent financial hardships that it brings.

Why is it important?

Early childhood experiences form the building blocks of a child's lifelong health and development. The science tells us that:

- In the first two years, a child forms an average of 700 neural connections per second, and by the age of 6, her brain will have already reached about 90 percent of its adult capacity.[2] [3]
- Nurturing environments and secure, stable relationships with adults help children thrive and contribute to their cognitive, social, and emotional development.[4]

Young brains are like sponges: they absorb an incredible amount from their environment. The technical term is "neural plasticity," and while some level of plasticity exists in adulthood, early childhood is when the brain is most malleable.[5] The presence of negative stimuli in a child's environment – such as poverty, emotional or physical abuse, and violence – can be damaging to a child's long-term development.[6]

Is all instability damaging?

Not all instability is damaging. According to the Center on the Developing Child at Harvard University, whether or not an event has long-term effects on a child depends in part on the level of stress it introduces:

- **Positive stress** is normal and even necessary. We experience this type of stress response routinely. For a child, this may be the anxiety that arises before receiving a vaccine at a doctor's visit.
- **Tolerable stress** arises out of more serious circumstances. For a child, this could mean coping with the loss of a family member. It is tolerable when the child is supported by nurturing, caring adults.
- **Toxic stress** occurs when a child experiences extreme adversities without an adequate buffer. It arises from frequent exposure to violence, abuse, or neglect. Stress from other sources, like chronic financial hardship, can also become toxic if the child is not adequately supported by an adult.

Children who face stress equipped with a supportive environment and stable relationships are likely to develop a healthy stress response system. Children who are unsupported by a consistent adult and who experience extreme and prolonged stress are at risk of long-term damage to health and development. Children exposed to toxic stress are at a greater risk for poor health outcomes such as heart disease and depression in adulthood.[7]

What can parents do?

Families are often confronted with stressful challenges that are beyond their control. But there are many ways parents can ameliorate the impact of stress and instability on children and support critical early development.

- **Reassure your child** – What is most helpful to your child during tough times is your reassurance and extra attention so that they can feel secure. Even a small act like hugging your child more or saying to your child "Everything will be O.K" can provide that reassurance.[8]
- **Take a breath** – Children pick up on parental stress, using that sponge brain of theirs. Recognizing and managing your own stress not only helps you cope better, but it also minimizes the stress your child will feel.

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- **Bond with your child** – Children with strong bonds to their parents have an advantage when stressful situations present themselves. As children develop, how their parents respond to their needs shapes their emotional, mental and social well-being.[9]
- **Establish routines** – Routines and consistency facilitate your child's learning and development, and contribute to a stable environment that will help your child thrive. A standard bedtime, for example, has been shown to have positive benefits for cognitive development and health.[10]

For more tips and information on how the best news, science, and research can help parents, businesses, and communities develop the most supportive environment for kids, sign up for alerts from Too Small to Fail, *an initiative of Next Generation and the Bill, Hillary & Chelsea Clinton Foundation.*

ENDNOTES

1 Heather Sandstrom and Sandra Huerta, "The Negative Effects of Instability on Child Development: A Research Synthesis" (Washington: Urban Institute, 2013), available at: http://www.urban.org/publications/412899.html.

2 Center on the Developing Child at Harvard University, "InBrief: The Science of Early Childhood Development" available at: http://www.developingchild.harvard.edu.

3 Joan Stiles and Terry L. Jernigan, "The Basics of Brain Development" Neuropsychology Review 20 (4) (2010): 327–348, available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2989000/.

4 Center on the Developing Child at Harvard University, "The Foundations of Lifelong Health Are Built in Early Childhood" Working Paper No. 5 (2010), available at: http://www.developingchild.harvard.edu.

5 National Scientific Council on the Developing Child, "The Timing and Quality of Early Experiences Combine to Shape Brain Architecture " (2007), available at: http://www.developingchild.harvard.edu.

6 Center on the Developing Child at Harvard University, "The Foundations of Lifelong Health Are Built in Early Childhood."

7 Ibid.

8 Anita Gurian, "Talking About Job Loss with Kids – How, When and What," The Child Study Center, September 10, 2008, available at: http://www.aboutourkids.org/articles/talking_about_job_loss_kids_how_when_what.

9 Center on the Developing Child at Harvard University, "The Foundations of Lifelong Health Are Built in Early Childhood."

10 Ibid.