



Center on the Developing Child  
HARVARD UNIVERSITY

# Driving Science-Based Innovation to Achieve Larger Impacts at Scale for Young Children Facing Adversity

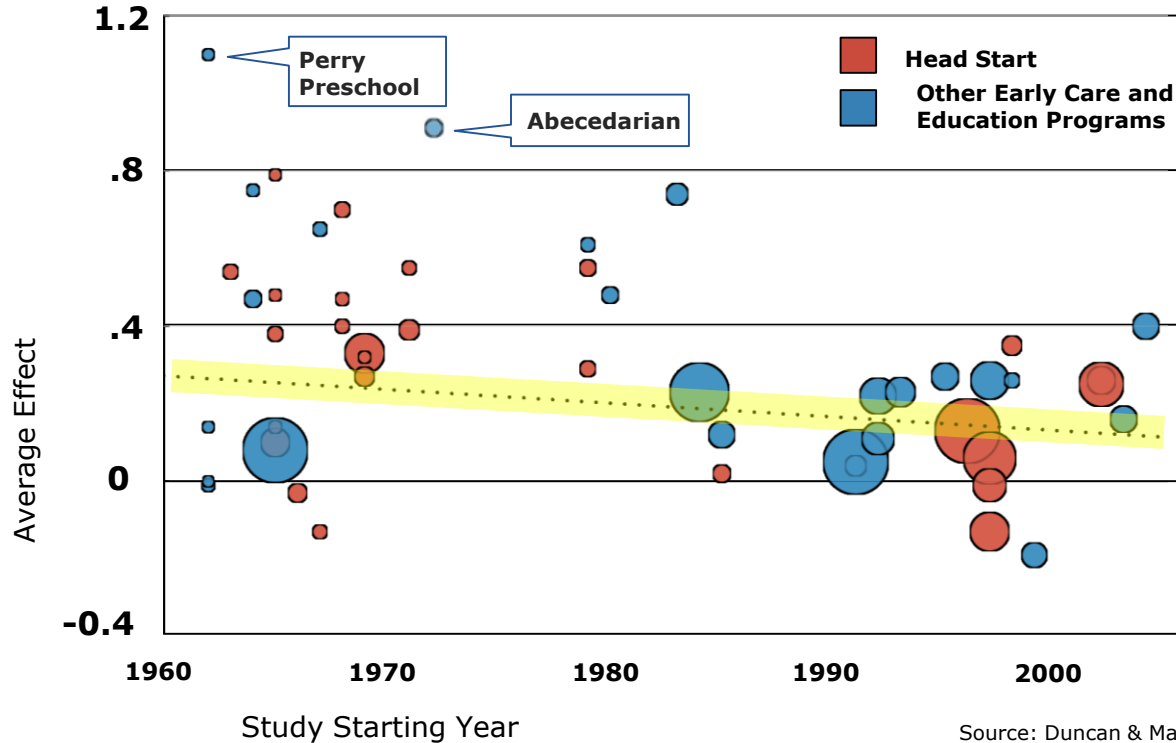
## **JACK P. SHONKOFF, M.D.**

Julius B. Richmond FAMRI Professor of Child Health and Development,  
Harvard T.H. Chan School of Public Health and Harvard Graduate School of Education.  
Professor of Pediatrics, Harvard Medical School and Boston Children's Hospital.  
Director, Center on the Developing Child at Harvard University.

Plenary Session  
Federal Reserve System Community Development Research Conference  
Washington, DC | March 23, 2017

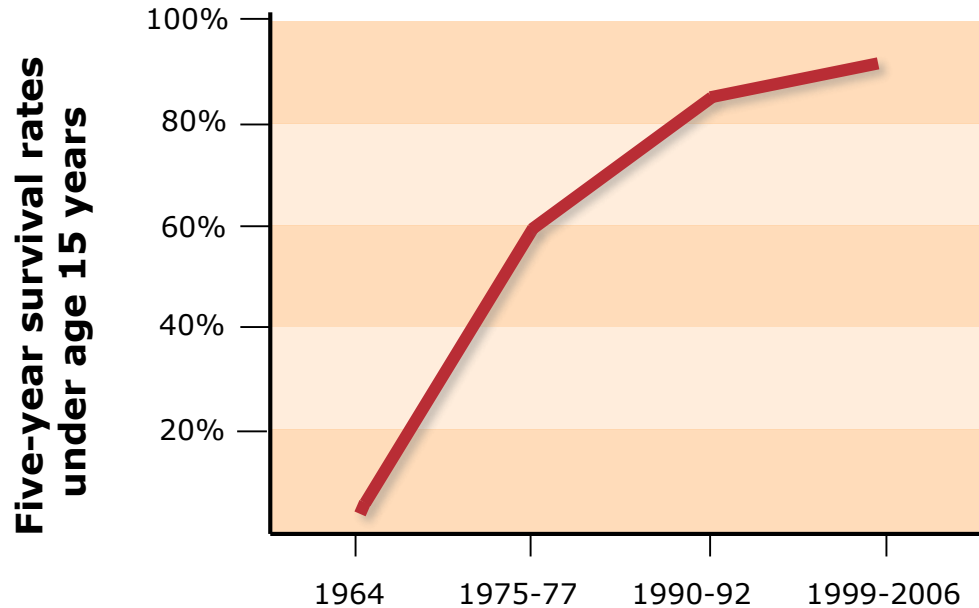


# The Evidence Base: 50 Years of Research on Early Childhood Programs Show We Need New Strategies



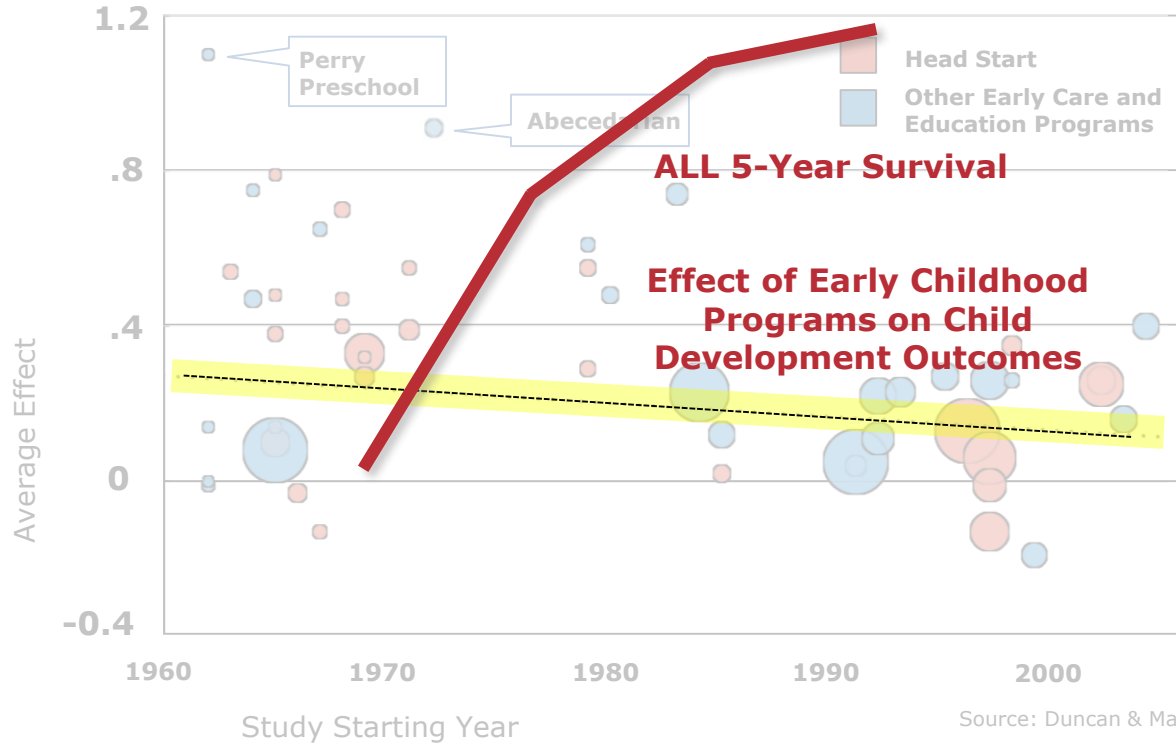
Source: Duncan & Magnuson (2013)

# The Vision: Learning from 50 Years of Progress in Treating Acute Lymphoblastic Leukemia

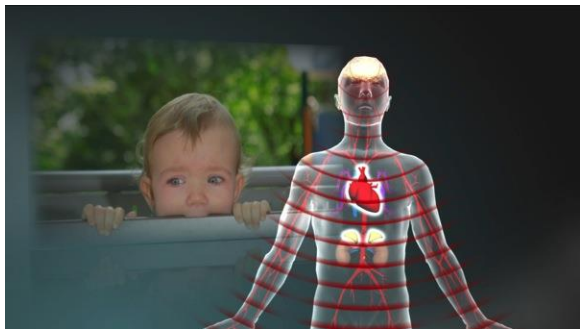


Source: Hunger, Lu, Devidas (2012)

# What Can We Learn from These Contrasting Stories?



# 21<sup>st</sup>-Century Science Suggests New Ways of Thinking About Intervention in the Early Years

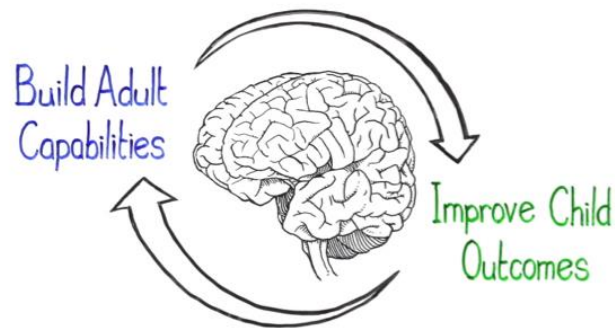


Attention to development should begin at birth (or even prenatally), not at age 4 or 5.

Early experiences affect lifelong health, not just learning.

Healthy development requires protection, not just enrichment.

Achieving far better outcomes for young children facing adversity requires that we: (1) support the adults who care for them to build their own capabilities; and (2) strengthen the capacity of communities to support families raising children under difficult circumstances.



# Capabilities that Promote Both Effective Parenting and Economic Productivity are Built on Foundational Skills in Executive Function and Self-Regulation



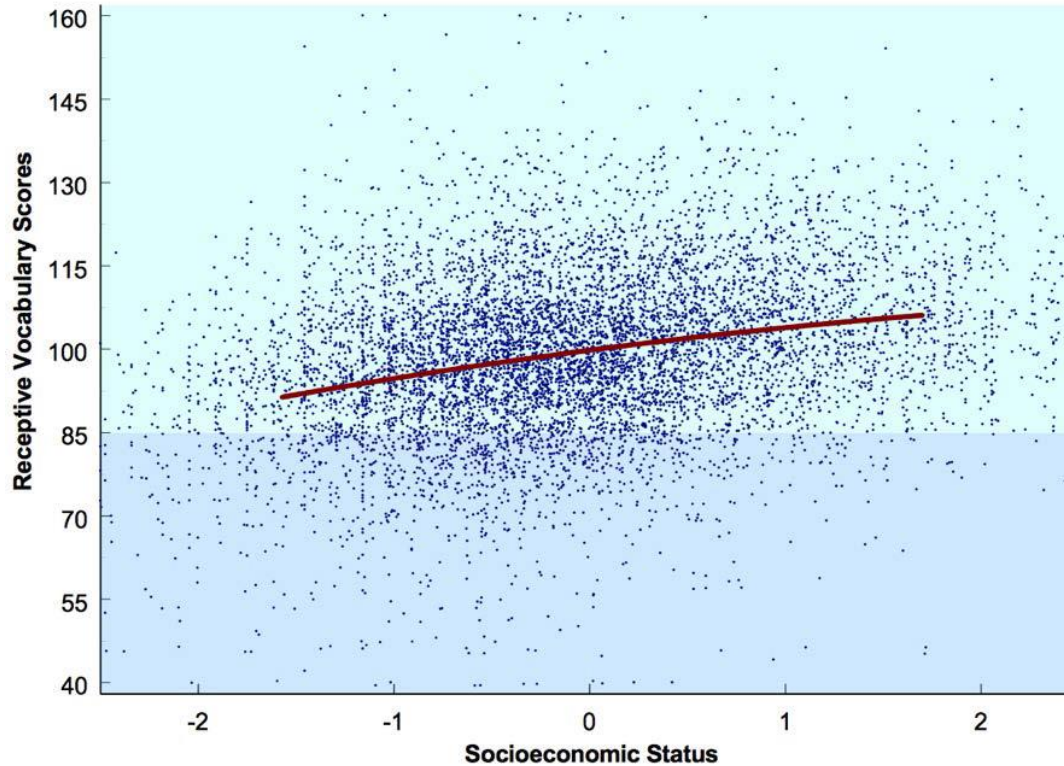
These core dimensions of adult competence include the ability to:

- focus and sustain attention
- set goals, make plans, and monitor actions
- make decisions and solve problems
- follow rules, control impulses, and delay gratification

# Two Windows for Intervention: The Development of Executive Function Skills Begins in Early Childhood and Extends Into the Early Adult Years



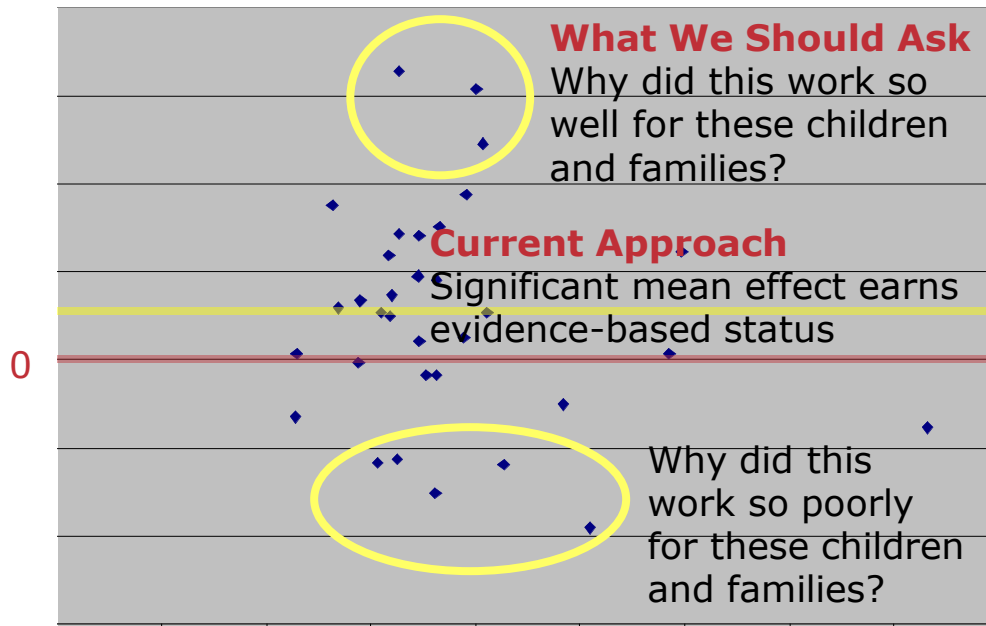
# Understanding Human Variation is the Key to More Effective Policies and Programs



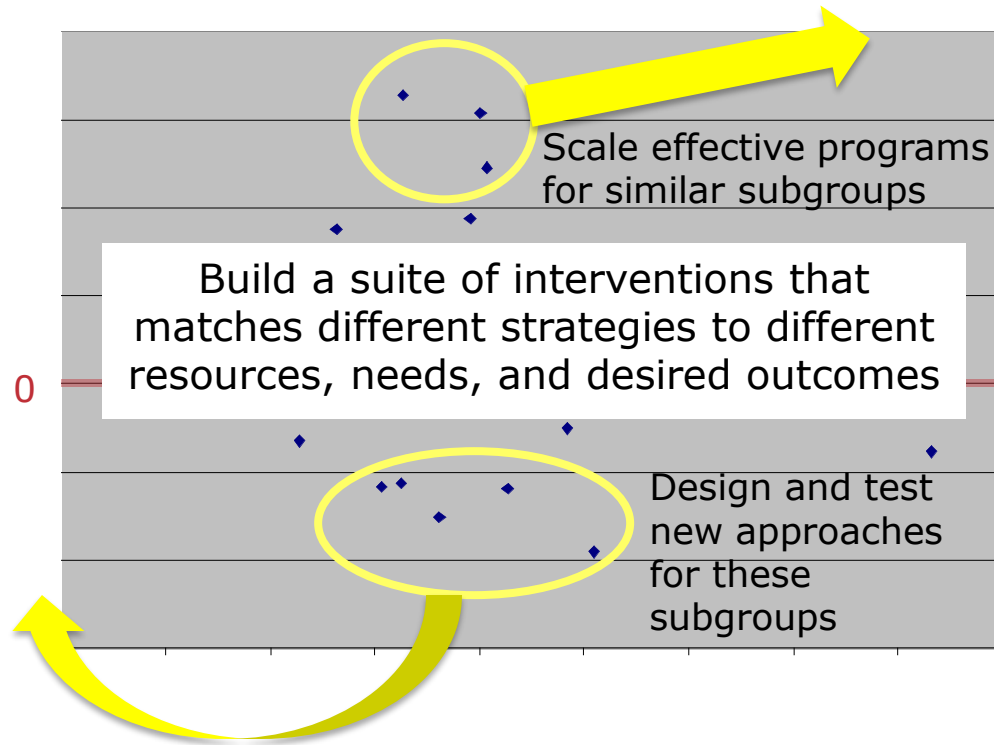
Source: NLSCY, Cycle 4 (2000-01)



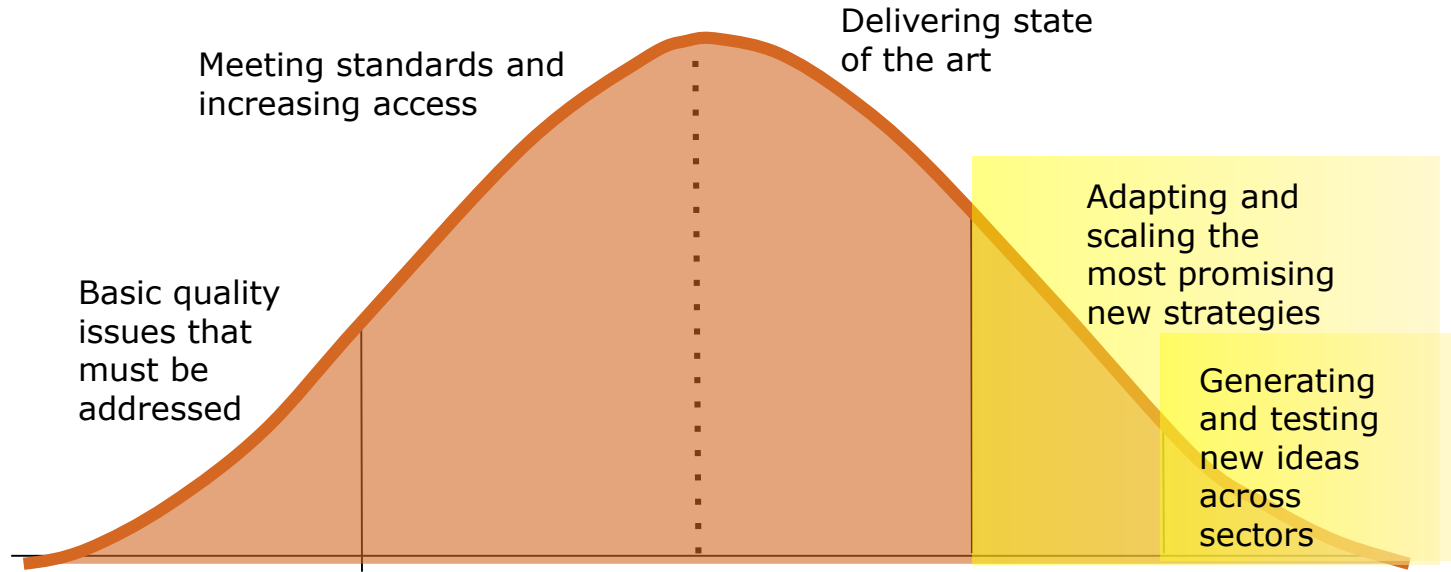
# Achieving Greater Impact at Scale Requires Rethinking the Criteria for Defining Evidence-Based Programs



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# A Diversified Investment Portfolio Offers a Mix of Objectives, Timelines, Risks, and Rewards



(Adapted from Everett Rogers,  
*Diffusion of Innovations*, 2003)



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About Science Innovation & Application

**NEW REPORT**

## From Best Practices to Breakthrough

A Science-Based Approach to Promising Future for Young Children

Learn More

Reaching for Breakthroughs with Science-Based Innovation

Science Innovation & Application

The science of early childhood is a source of new ideas that could be used to address such threats by catalyzing more effective policies and services focused on the early years of life.

### Science

The frontiers of 21st-century science are a relatively untapped source of new ideas that could be used to address such threats by catalyzing more effective policies and services focused on the early years of life.

Science tells us that early childhood is a time of both great promise and considerable risk. Having responsive relationships with adults, growth-promoting experiences, and healthy environments for all young children helps build sturdy **brain architecture** and the foundations of **resilience**. Meanwhile, significant disadvantages can disrupt the developmental process and lead to limited economic and social mobility that threatens the vitality, productivity, and sustainability of society.

**Key Concepts**

**Deep Dives**

These **key concepts** are the building blocks of the science of child development. Each page within this section provides a concise overview of the concept.

**Innovation & Application**

The science of development is a powerful source of fresh thinking about how to increase opportunities early in life for all children. Using current best practices as a starting point, the Center is working with a network of researchers, practitioners, and community members to design, implement, and evaluate innovative, science-based practice models that achieve transformational change for vulnerable children and families.

**Key Concepts**

**Innovation in Action**

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