



Center on the Developing Child
HARVARD UNIVERSITY

Moving Beyond Why and What to the Compelling Question of “What’s Next?”

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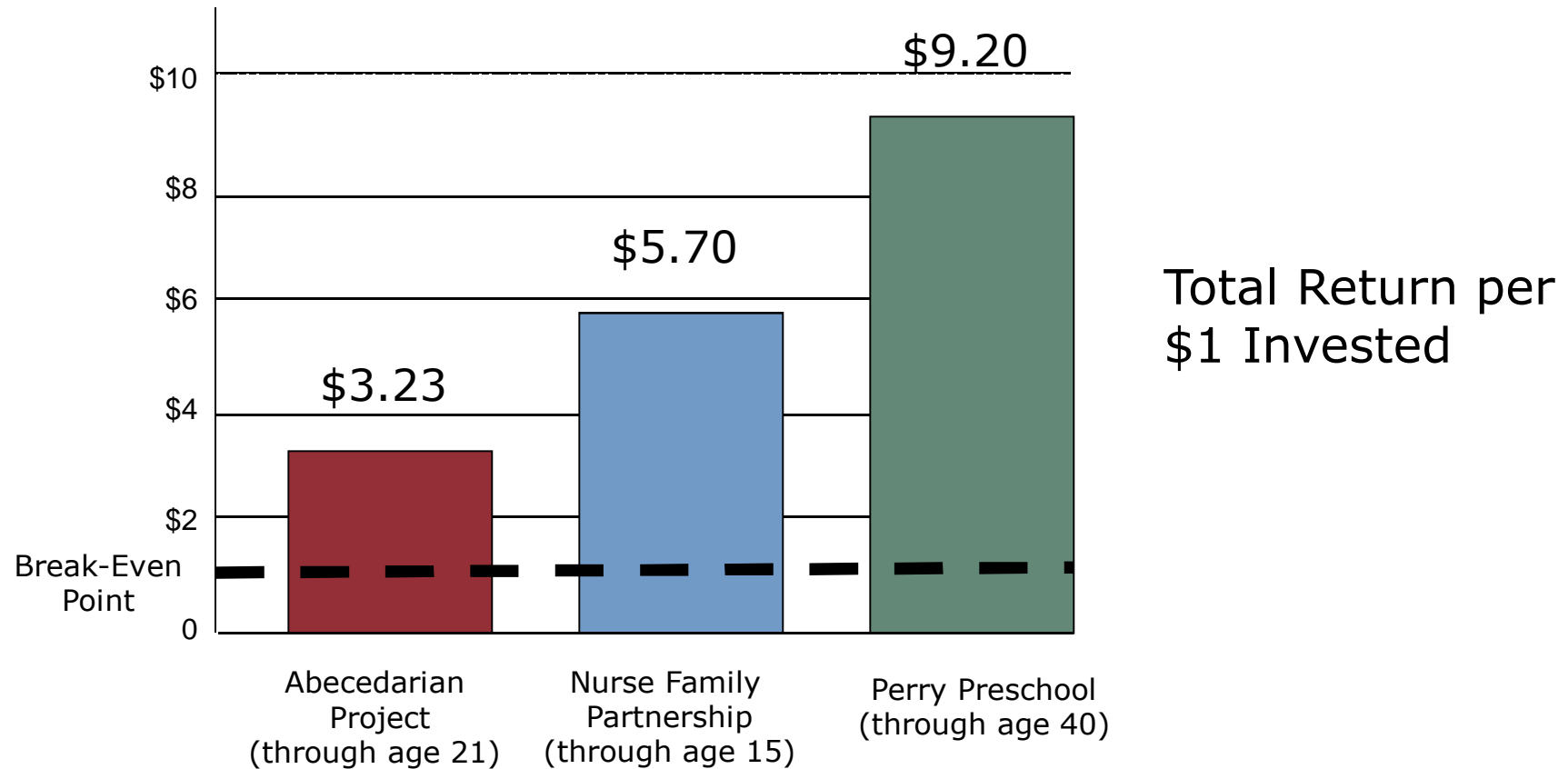
Creating the Future of Early Childhood Policy and Practice

Science: a different way of thinking fueled by an expanded definition of evidence

Innovation: a different way of working at the edges of research and service delivery

Distributed Leadership: a new breed of change agents who view current best practices as a starting point, not a destination

Cost-Benefit Analyses of Early Childhood Programs Show a Range of Positive Financial Returns (The Answer to "Why?")



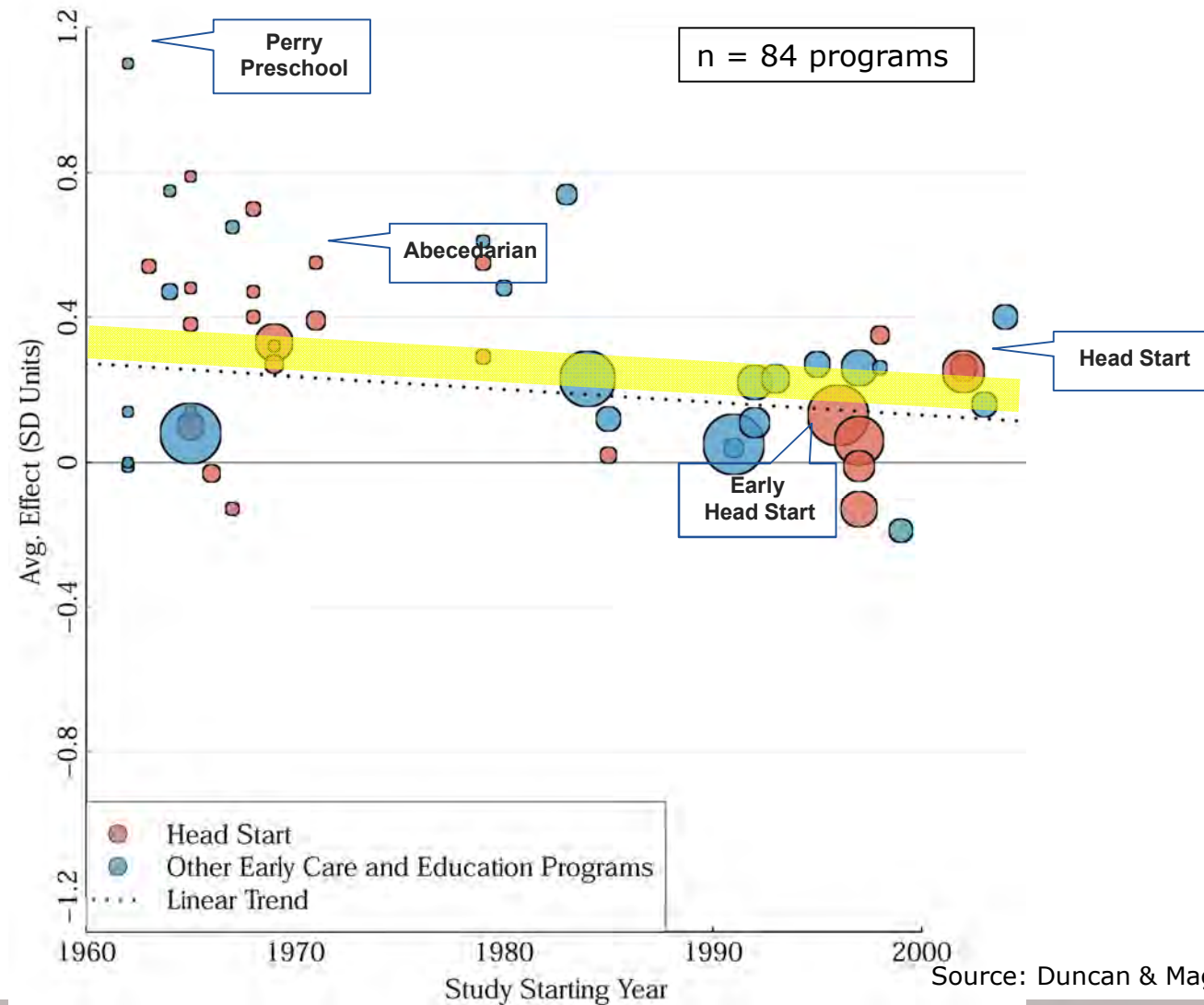
Sources:

Karoly et al. (2005)

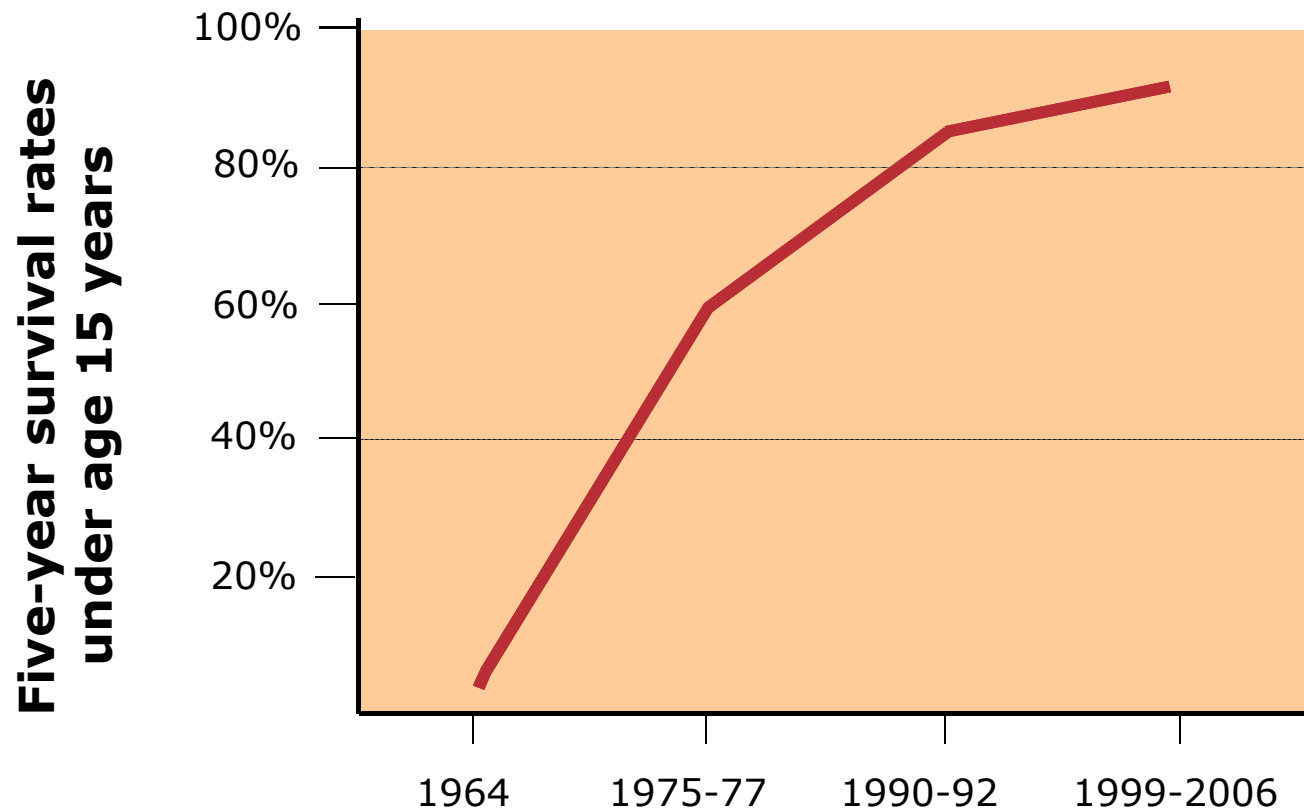
Heckman et al. (2009)

Effects of Early Education on Child Achievement and Cognition Illustrate Impact and Challenges

(The Answer to "What?")



Dramatic Increases in Survival Rates for Acute Lymphocytic Leukemia Convey Important Lessons (A Model for "What's Next?")

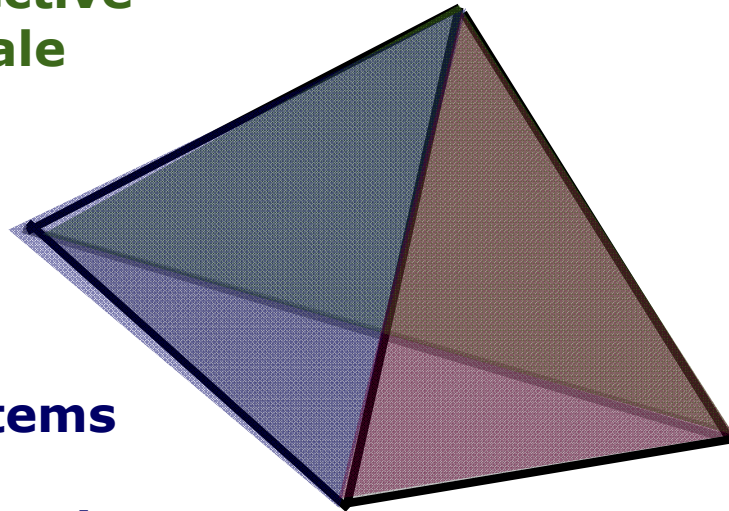


Source: Hunger, Lu, Devidas (2012)

Increasing Returns on Current Early Childhood Investments Requires Three Critical Strategies

**Enhance quality
and take effective
models to scale**

**Build strong systems
for coordinated
service delivery and
data management**



**Leverage advances
in science to
formulate new
theories of change,
design and test
novel strategies,
and learn from
interventions that
don't achieve
sufficiently larger
impacts**

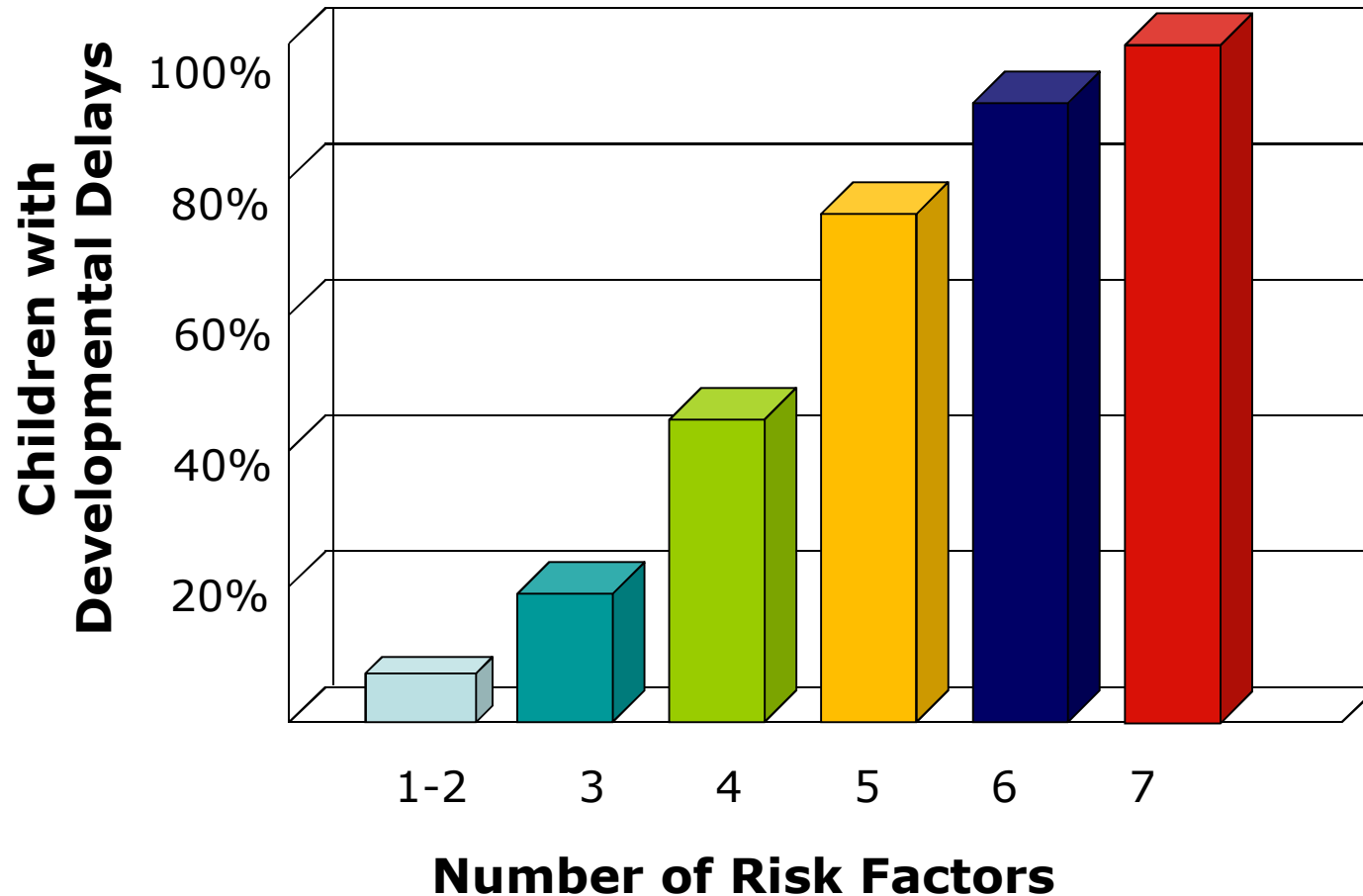
Genes and Experiences Interact to Build Brain Architecture



Link to Video:

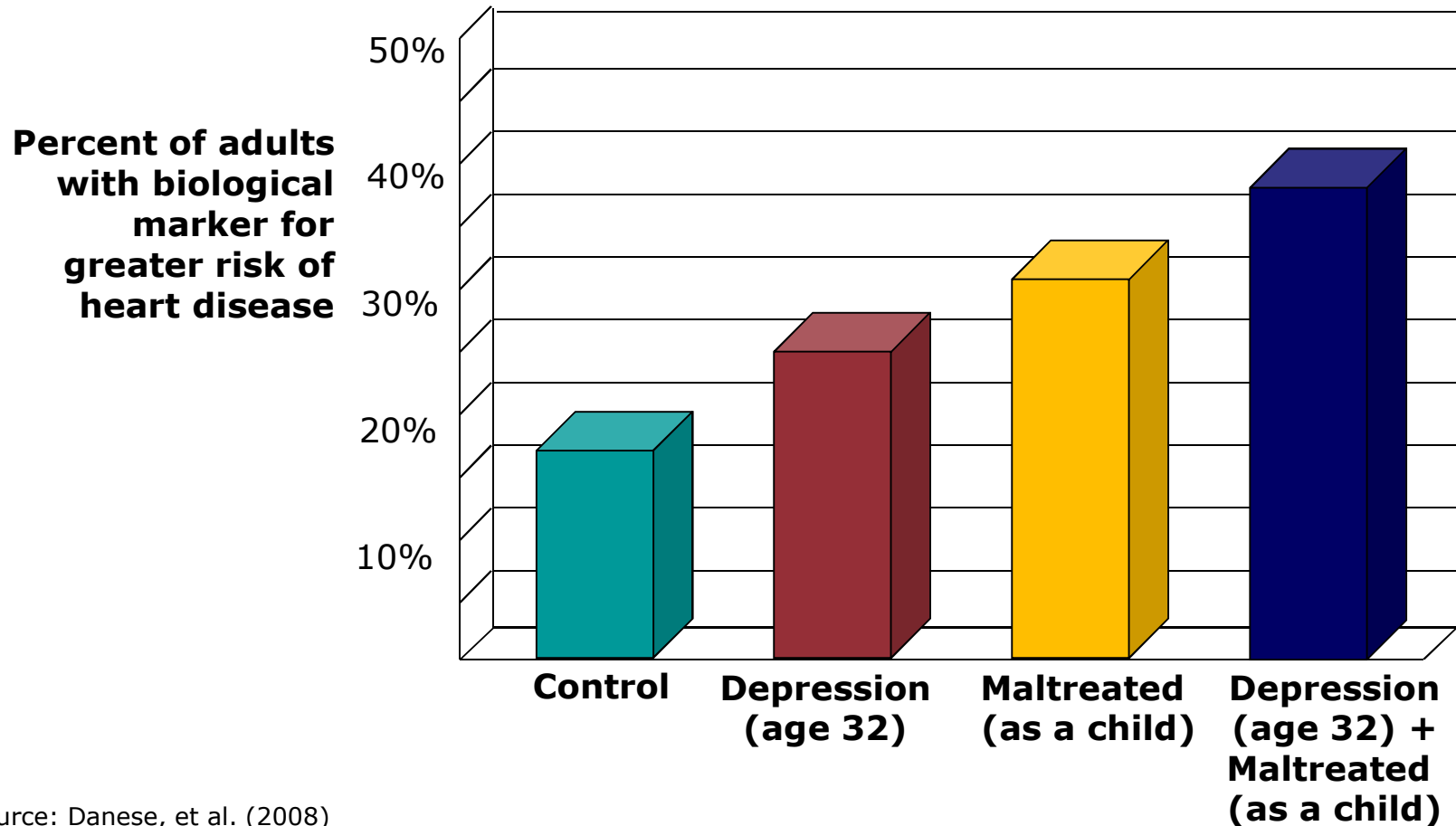
http://developingchild.harvard.edu/resources/multimedia/videos/three_core_concepts/brain_architecture/

The Cumulative Pile Up of Adversity Impairs Development in the First Three Years



Source: Barth, et al. (2008)

Biological “Memories” Link Maltreatment in Childhood to Greater Risk of Adult Heart Disease



Source: Danese, et al. (2008)

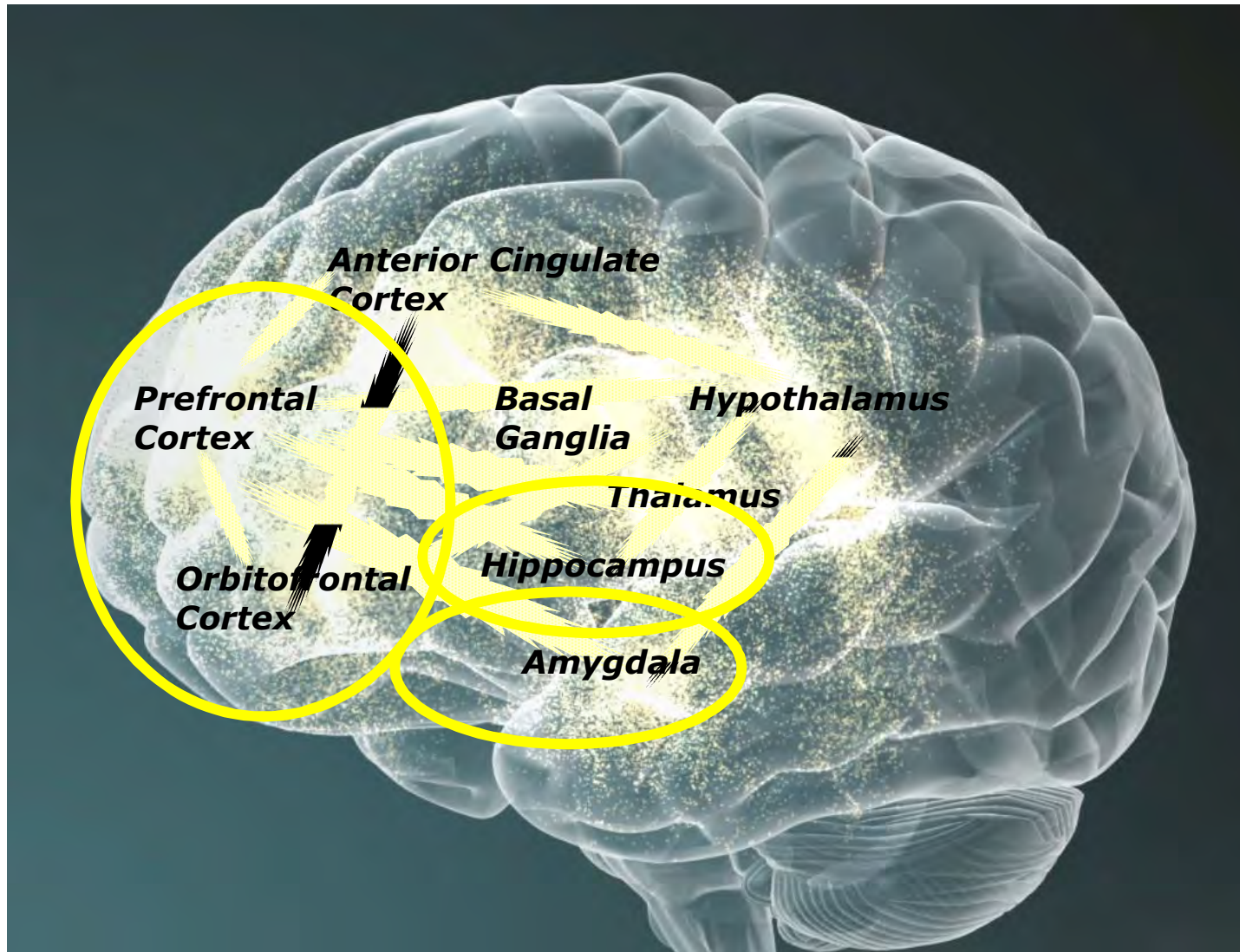
Toxic Stress Derails Healthy Development



Link to Video:

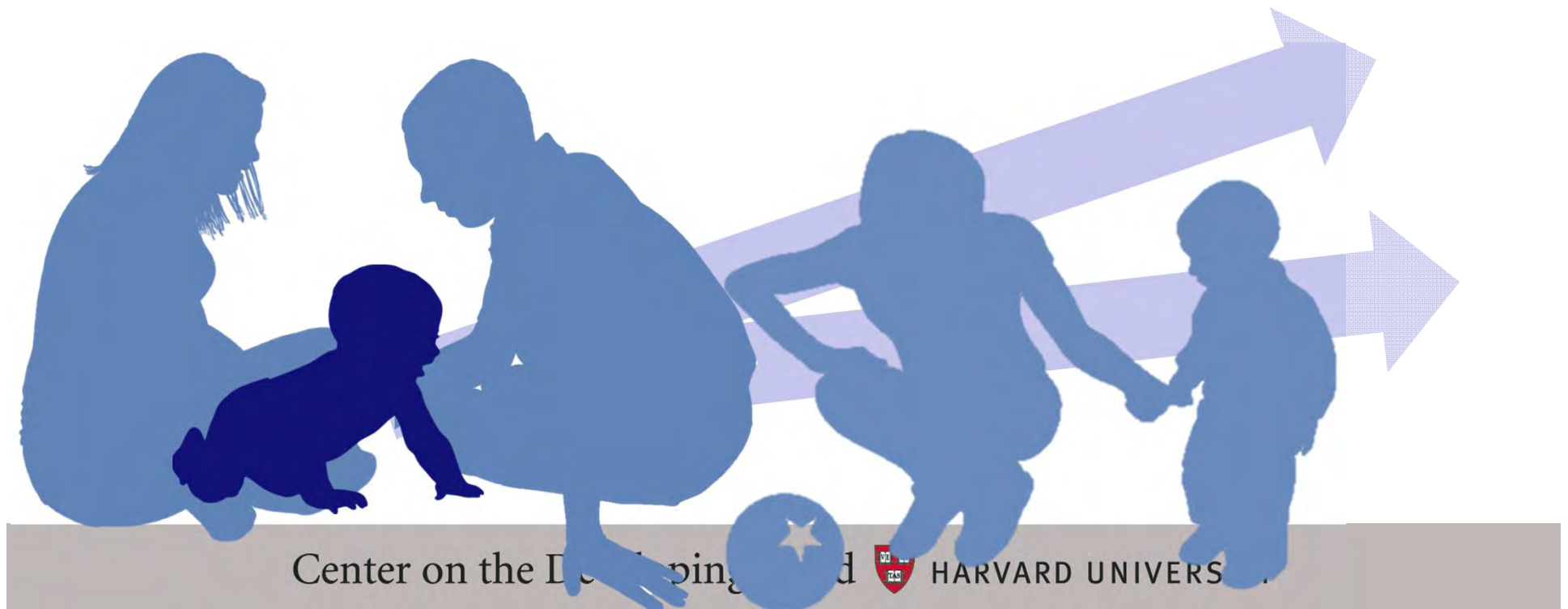
http://developingchild.harvard.edu/resources/multimedia/videos/three_core_concepts/toxic_stress/

Cognitive, Emotional, and Social Circuits are Highly Intertwined



Using 21st Century Science to Change the Narrative for Policy and Practice Across Sectors

Early experiences affect lifelong health **and** learning
Healthy development requires protection **and** enrichment



Generating Hypotheses to Guide New Intervention Strategies

Early experiences affect lifelong health *and* learning

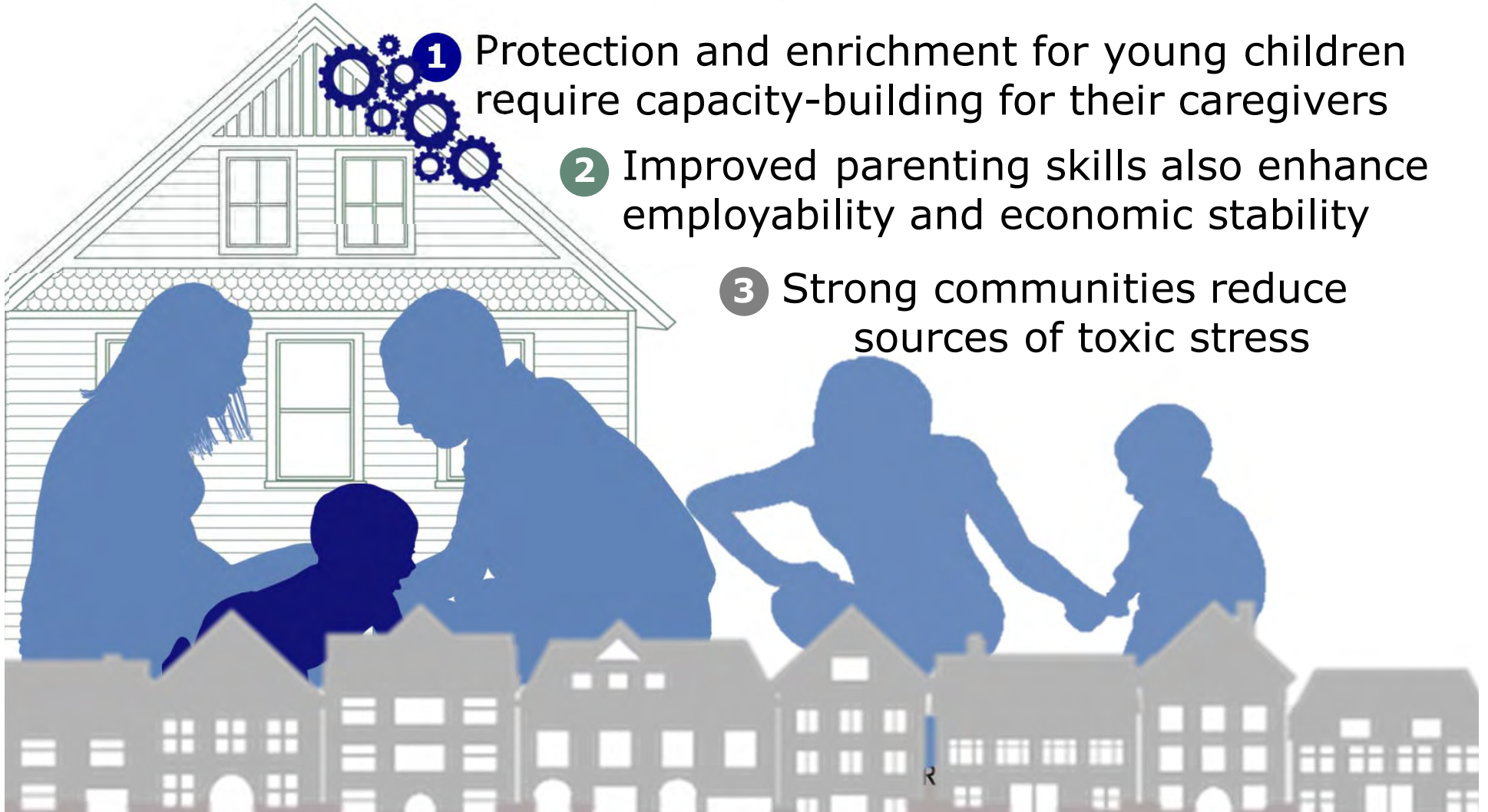
Healthy development requires protection *and* enrichment



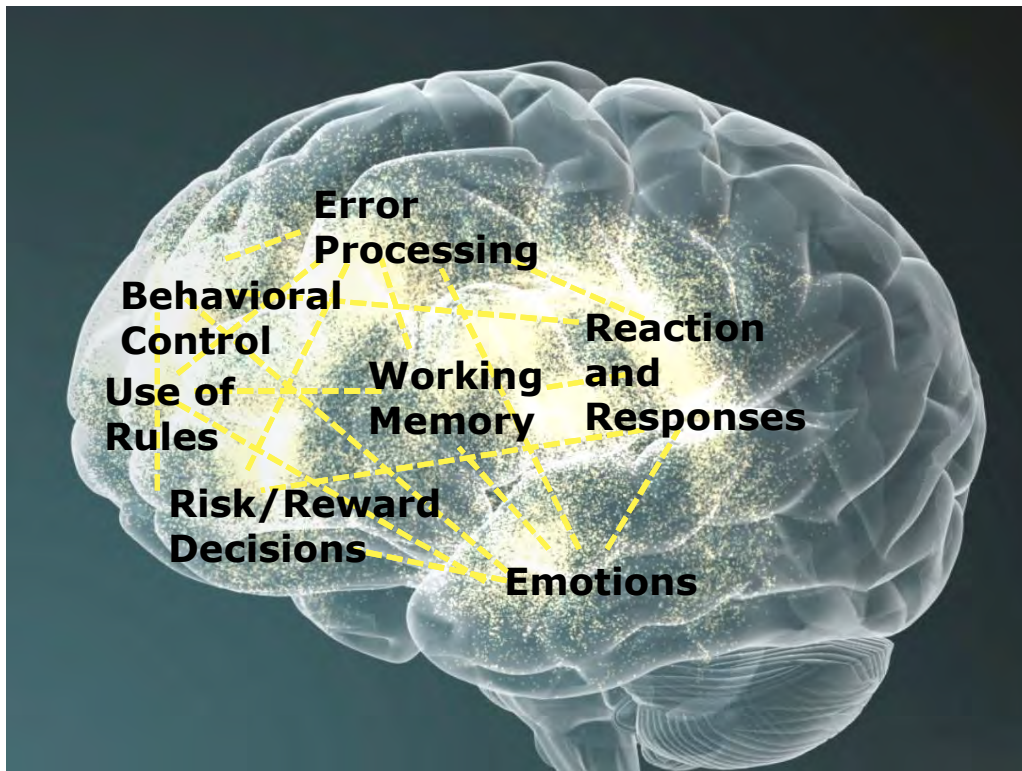
1 Protection and enrichment for young children require capacity-building for their caregivers

2 Improved parenting skills also enhance employability and economic stability

3 Strong communities reduce sources of toxic stress

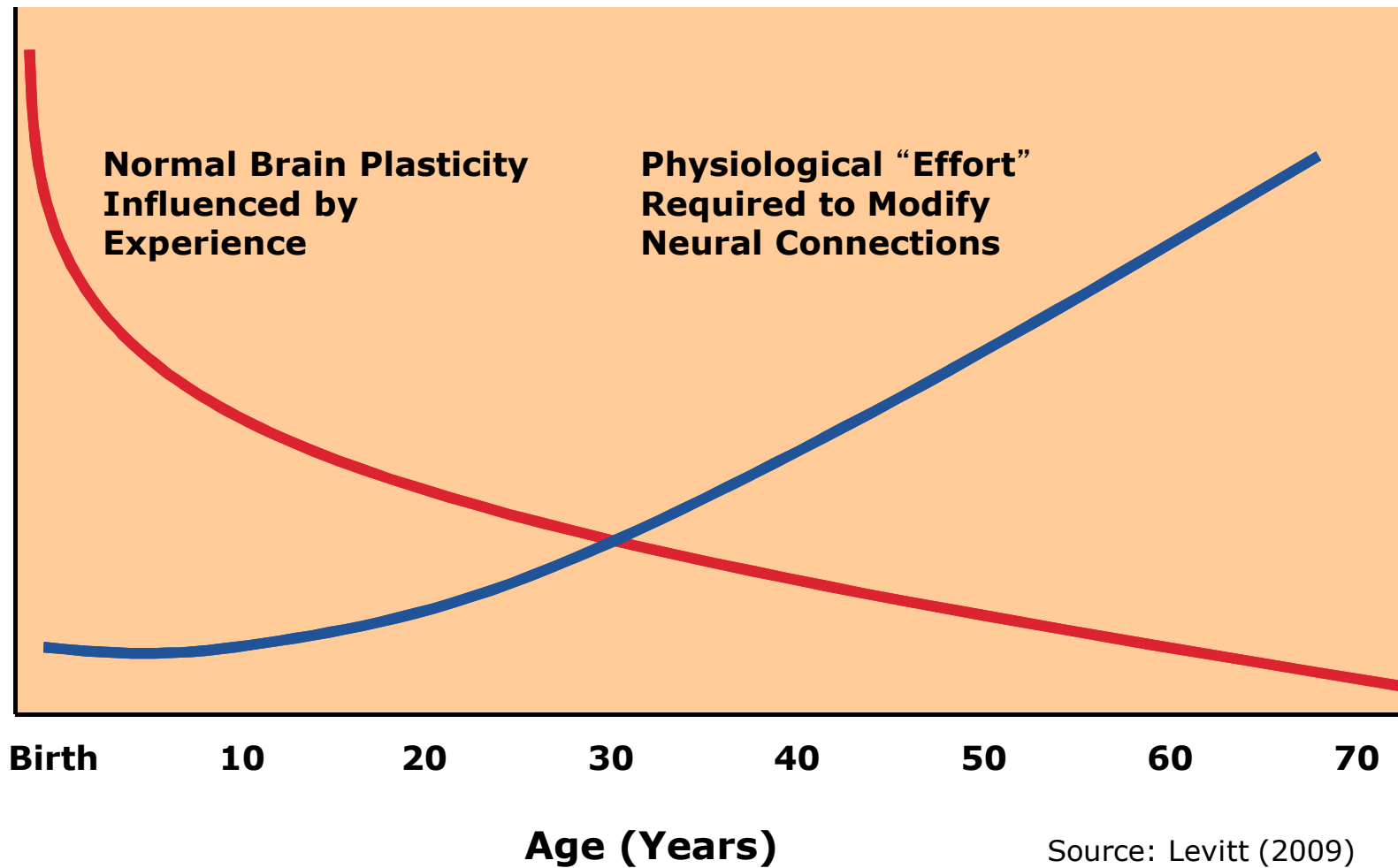


Skill Building for Parenting and Economic Self-Sufficiency Points to the Foundational Role of Executive Function and Self-Regulation Skills

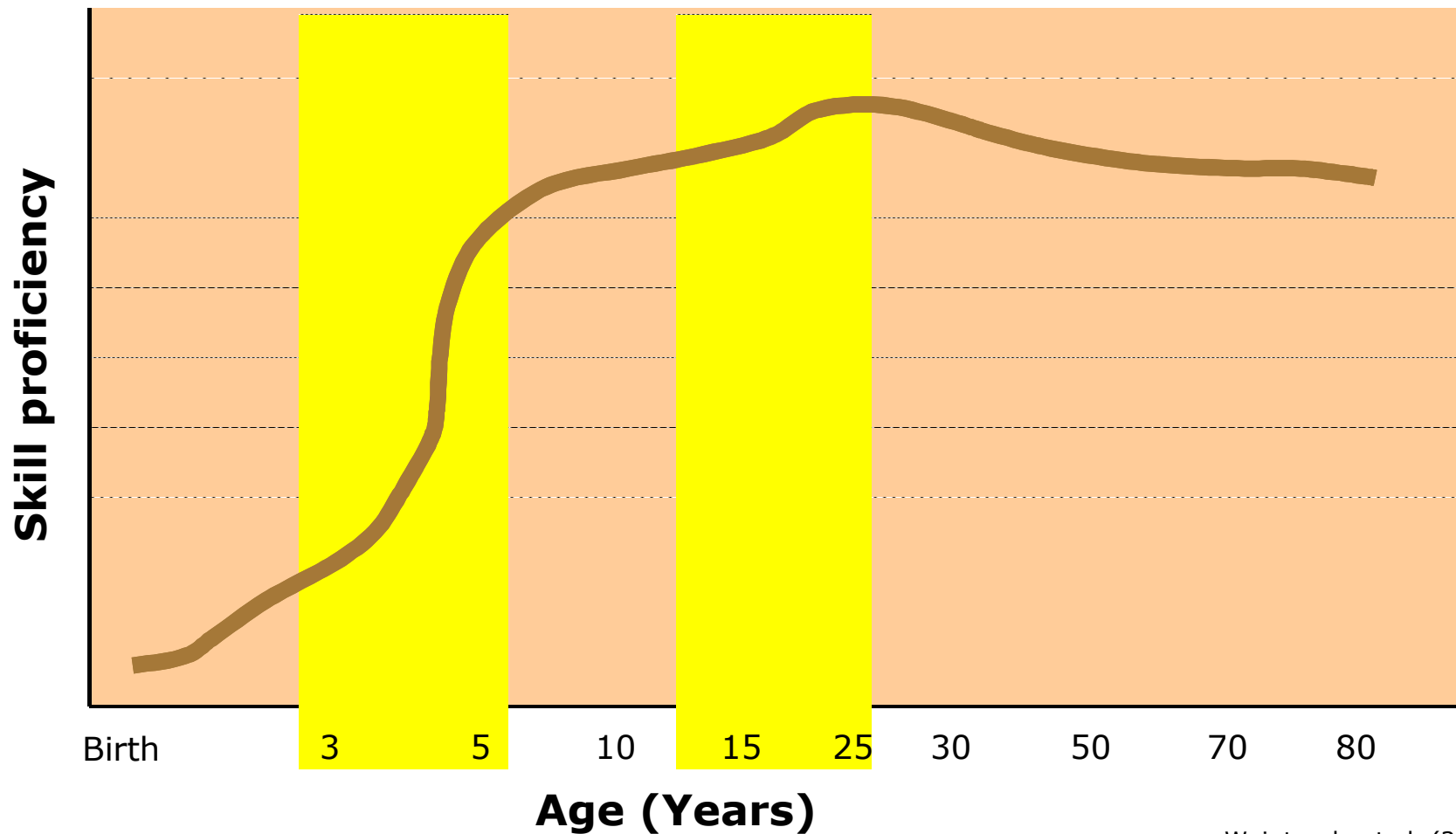


These core dimensions of adult competence include the ability to focus and sustain attention; set goals, make plans, and monitor actions; make decisions and solve problems; follow rules, control impulses, and defer gratification.

The Challenge: The Ability to Change Brains and Behavior Decreases Over Time

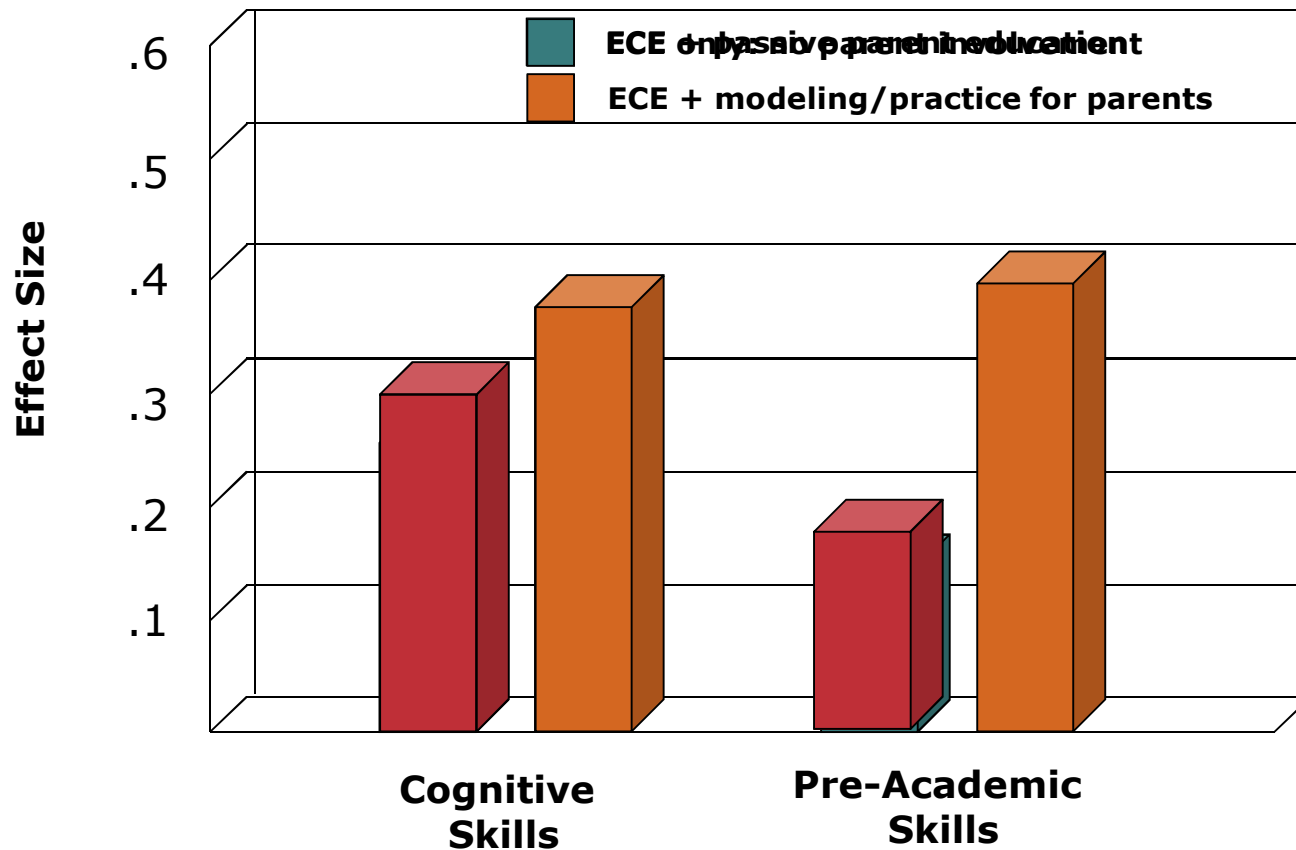


The Opportunity: The Development of Executive Function Skills Begins in Early Childhood and Extends into the Early Adult Years



Weintraub, et al. (2011)

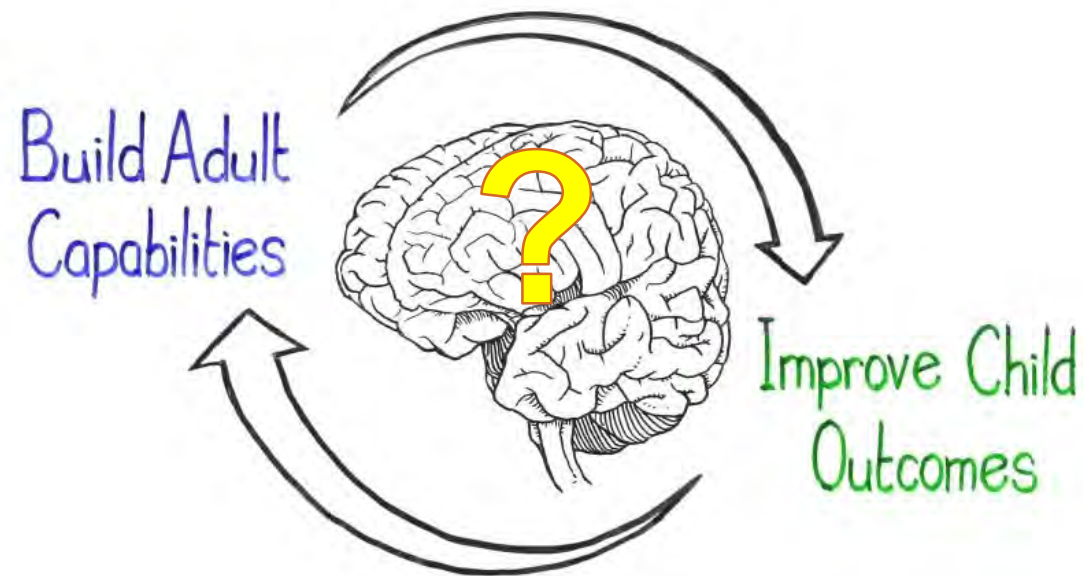
What Have We Learned About the Effects of Alternative Strategies for Engaging Parents and How Are We Using That Knowledge?



Average Impacts of 88 Early Childhood Education Programs (1960-2007)

Source: Grindal, et al. (under review)

21st Century Science Points Toward a New Theory of Change for Policy and Practice



If we really want to achieve breakthrough outcomes for children facing significant adversity, then we have to transform the lives of the adults who care for them.

Innovation as a Different Way of Working at the Interface of Research and Practice

Conventional Context

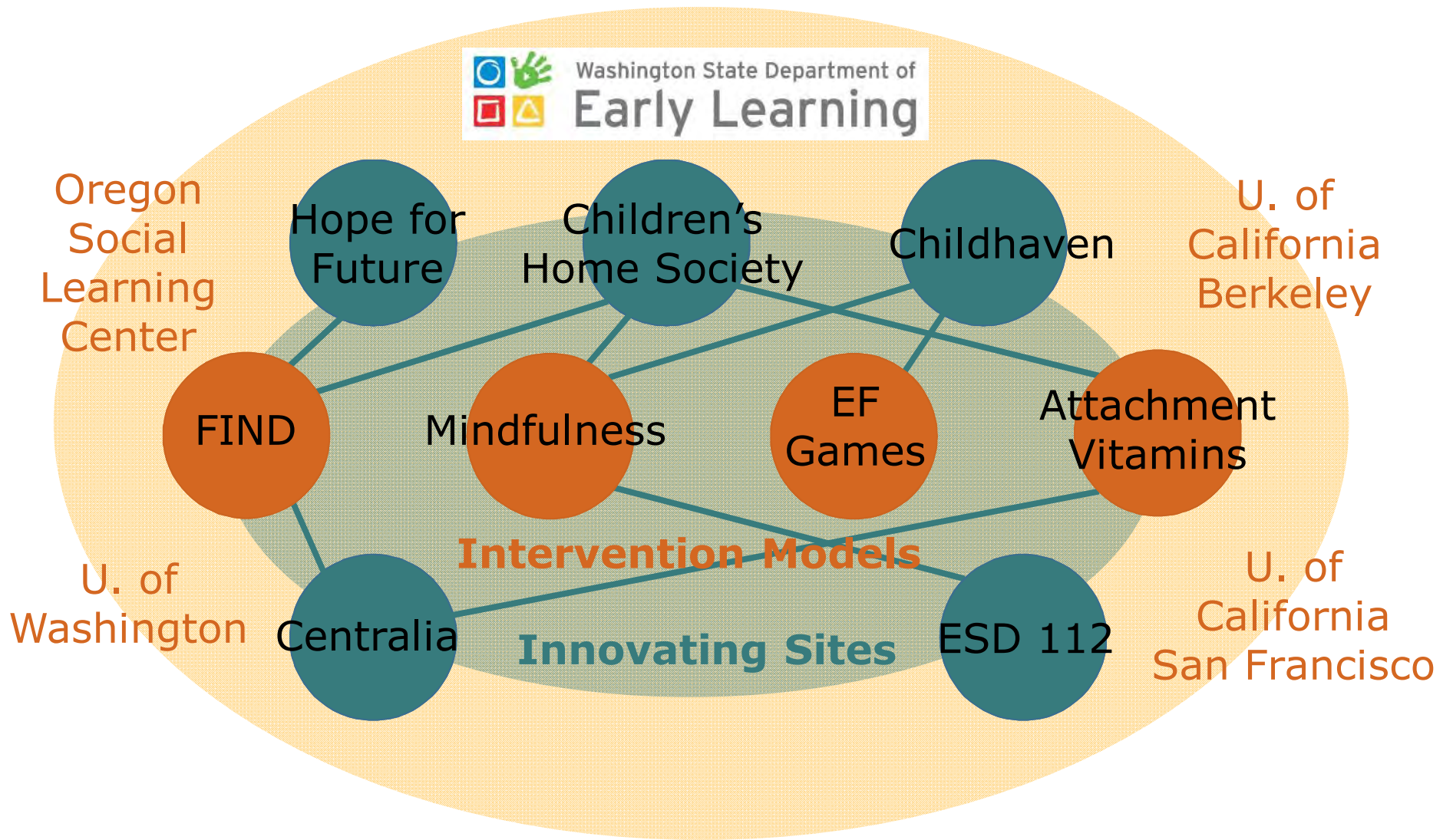
Traditional funding model
Premium on low-risk studies
Constraints on mid-course corrections
Relatively long cycle for impact
Failure is costly in time and money

Alternative Strategy

Flexible “venture” investing
Premium on high-risk trials of new ideas
Dynamic evaluation with frequent adjustments
Fast cycle sharing
The only failure is the failure to learn



Building an FOI Innovation Cluster in Washington State





FIND

Mindfulness

EF
Games

Attachment
Vitamins

FIND: video coaching for caregivers of high risk children.

“Goal: improve %serve and return+interaction

“Early Head Start home visiting (mothers and fathers); family child care

Mindfulness: parenting program teaching mindfulness techniques

“Goal: improve preschoolers’ executive function and build parent self-regulation and parenting skills.

“Read & Play parent groups

EF Games: Play-based activities and coaching

“ Goal: improve early cognitive skills through intergenerational play.

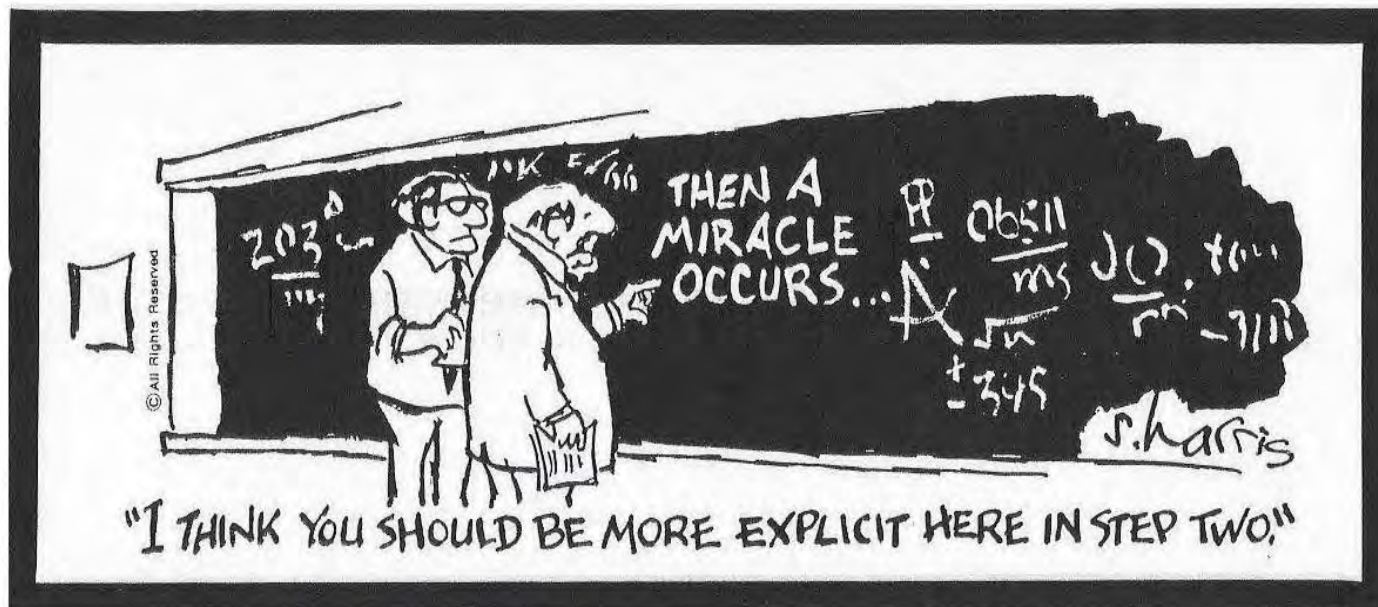
“ Therapeutic preschool classroom; Parent therapy programs;
Teen parent education course

Attachment Vitamins: psycho-educational module targeting families dealing with toxic stress

“ Goal: strengthen parent-child attachment despite adverse experiences

“ Early Head Start home visiting; Teen parent education course

The Compelling Need for an R&D Platform to Develop and Test New Ideas





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The image displays a collage of overlapping screenshots from the Center on the Developing Child website. The screenshots show various content sections:

- Top Left:** A navigation menu with categories like "BROWSE BY TOPIC" (Science of Early Childhood, Understanding Interventions, Innovation, Global Child Development, Foundations of Lifelong Health), "ACTIVITIES", "RESOURCES", "FACULTY & PARTNERS", "NEWS & EVENTS", and "ABOUT". Below it is a "RELATED CONTENT" section with links to "Podcasts", "Reports & Working Papers", "Multimedia", and "Scientific Evidence in Layperson's Terms". A "NEWSLETTER" sign-up box is also present.
- Top Center:** A "NEW VIDEO" section titled "InBrief: Executive Function: Skills for Life and Learning". It features a video thumbnail of children playing and a brief description of the video's content.
- Center:** A "MULTIMEDIA" section titled "InBrief: The Impact of Early Adversity on Children's Development". It includes a video player showing a diagram of brain architecture. The diagram compares "Normal" brain architecture (typical neuron with many connections) with "Toxic Stress" brain architecture (neuron damaged by toxic stress, fewer connections). Below the video is a text summary and a "Share this page" button.
- Right:** A "REPORTS & WORKING PAPERS" section titled "The Foundations of Lifelong Health Are Built in Early Childhood". It features a cover image of the report and a text summary. Below the summary are links for "Download PDF", "Summary of Executive Findings", "Order printed copies", "Press release", "NCS PowerPoint Presentation, Aug. 7, 2007 (PDF)", and "Summary of report in NGA Center for Best Practices 'Bright Futures' (October)".

www.developingchild.harvard.edu