

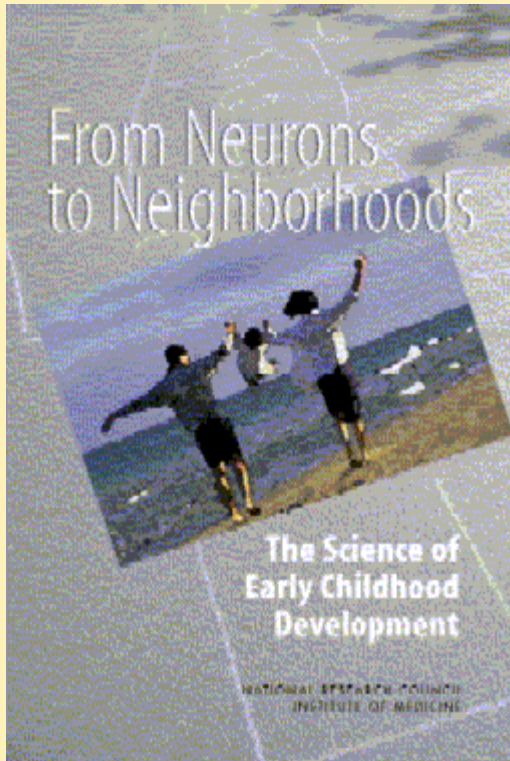
Human Capital: Investment in Early Childhood

Ross A. Thompson, Ph.D.
Department of Psychology
University of California
Davis, CA 95616
rathompson@ucdavis.edu



NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD

www.developingchild.net



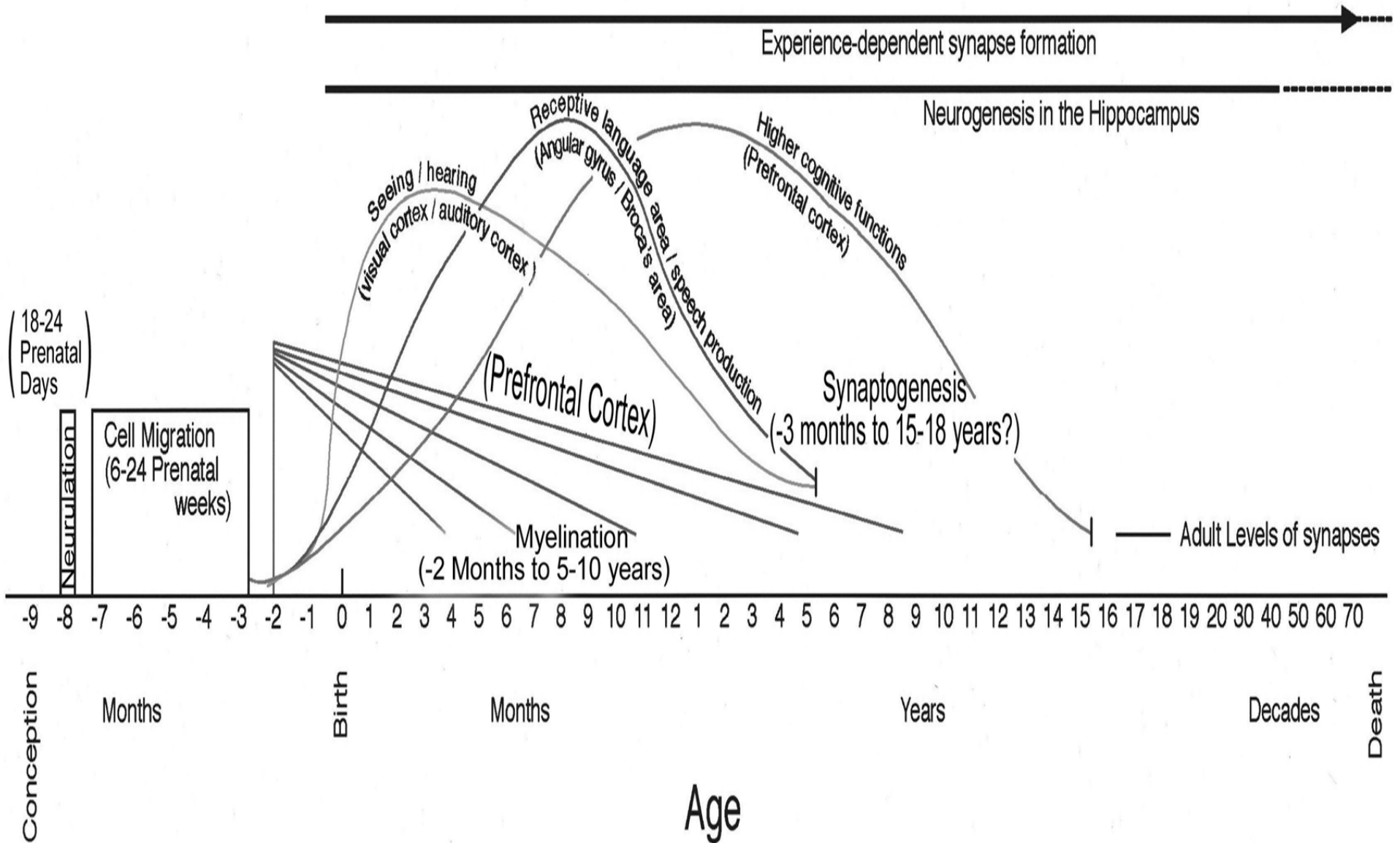
“The early childhood years lay a foundation that influences the effectiveness of subsequent education efforts.”

“Early intervention programs can improve the odds for vulnerable young children”

From Neurons to Neighborhoods: The Science of Early Childhood Development
(www.nap.edu)

Early experience scaffolds developing brain architecture

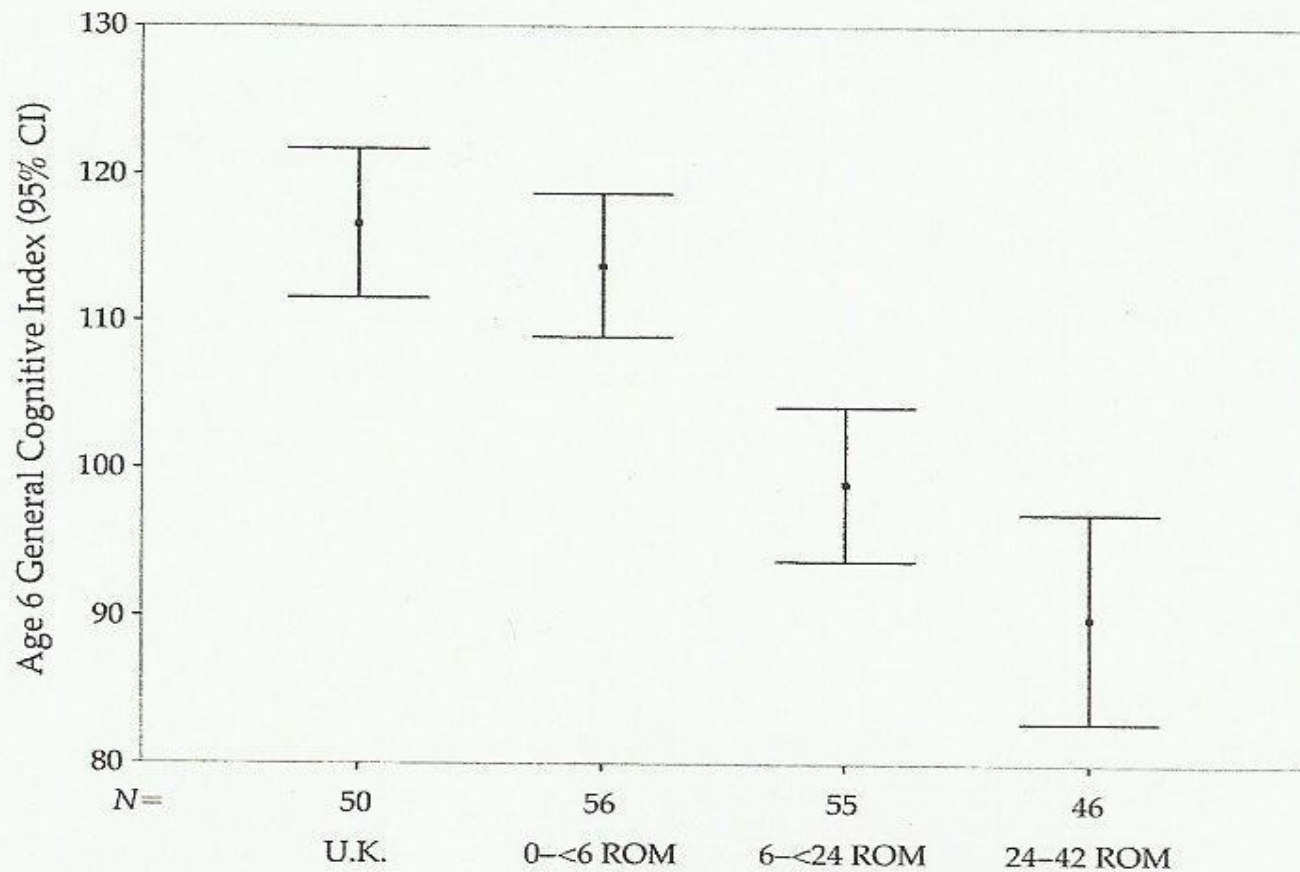
- **Maturational processes “expect” critical environmental stimulants (e.g., patterned light; language; movement and touch)**
- **Brain growth is also shaped by typical and atypical experiences (e.g., stress)**
- **These experiential influences begin prenatally, and the earliest are most foundational**



Thompson, R. A., & Nelson, C. A. (2001). Developmental science and the media: Early brain development. *American Psychologist*, 56(1), 5-15.

Because early experiences are so influential . . .

- **early development is a period of considerable potential but also heightened vulnerability**
- **later compensation is possible, but it is often costly, difficult to accomplish, and sometimes incomplete**
- **prevention of harm rather than later remediation reflects a better investment in enhancing developmental potential**



O'Connor, T. G., Rutter, M., Beckett, C., Keaveney, L., Kreppner, J. M., and the English & Romanian Adoptees Study Team (2000). The effects of global severe privation on cognitive competence: Extension and longitudinal follow-up. *Child Development*, 71, 376-390.

Cognitive and Emotional Development are Interdependent

- **Early learning is naturally social**
- **Learning at any age requires attentional & emotional self-control, cooperation, curiosity, and self-confidence**
- **Stressful experiences blunt early learning**
- **Implications for school readiness**

**Early investment in child
development is important**

**Early and continuing
investment in
development is better**

“Because it began in early infancy and continued until the age of 8, the Abecedarian intervention represents . . . an unusually protracted period of continuous educational intervention . . . The length of treatment may be one reason why both programs have found IQ gains persisting longer than those reported by most other early intervention programs.”

**-- Campbell & Ramey
Child Development, 1994, 65, 694**