

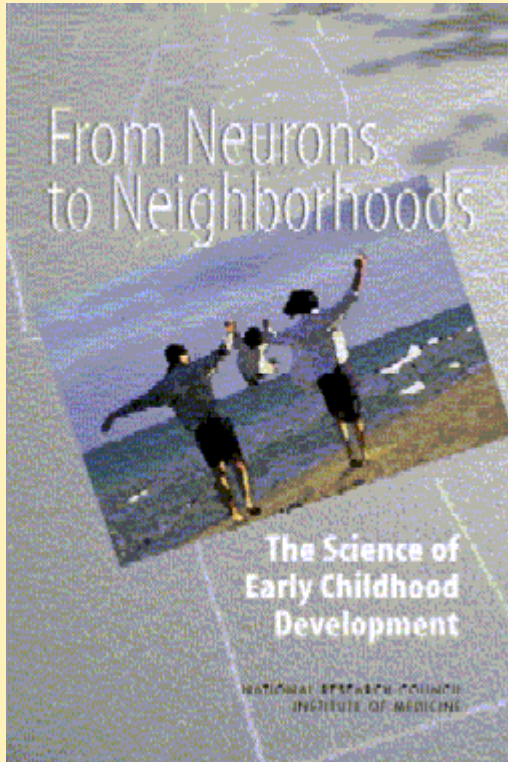
Human Capital: Investment in Early Childhood

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NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD

www.developingchild.net



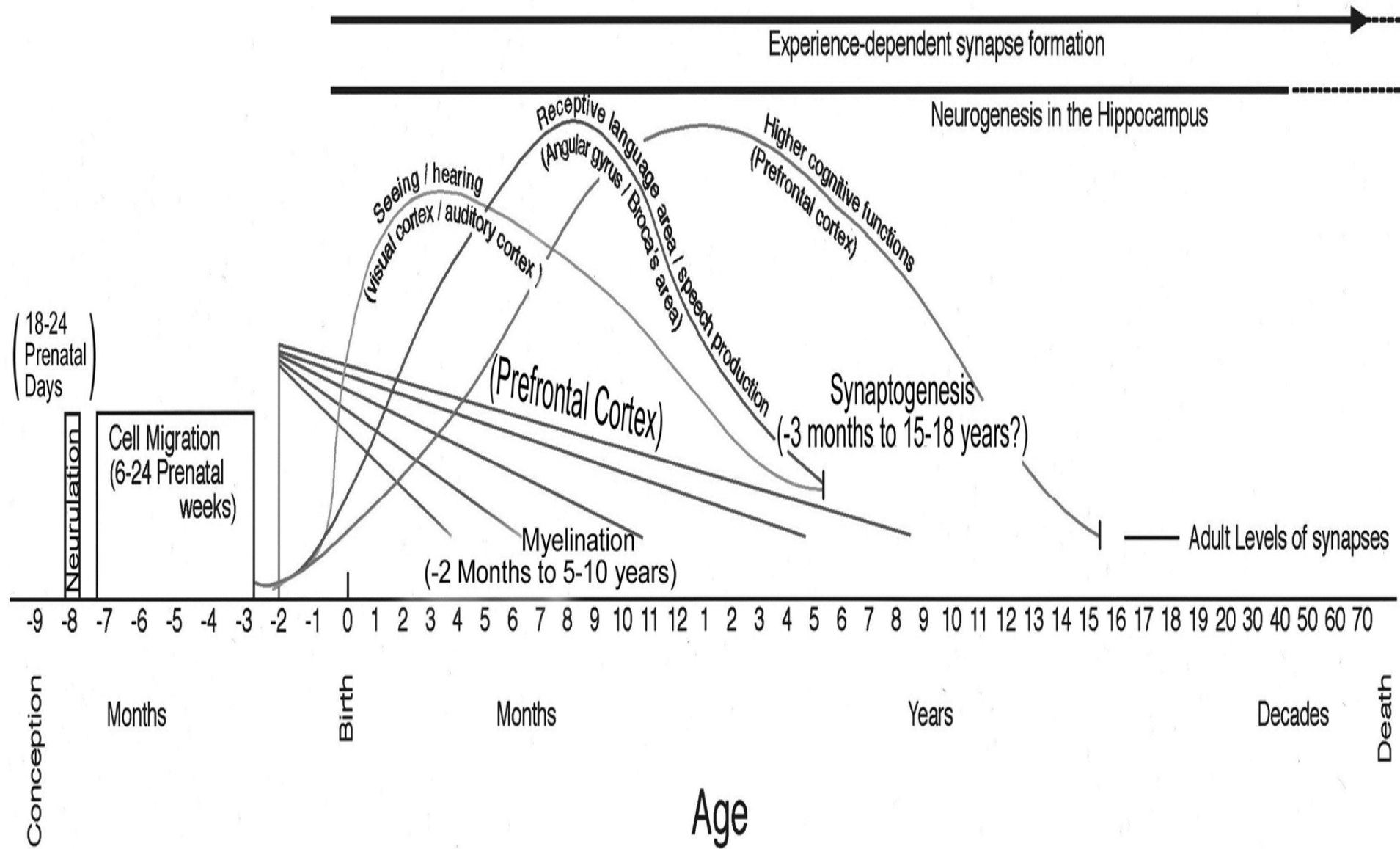
“The early childhood years lay a foundation that influences the effectiveness of subsequent education efforts.”

“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

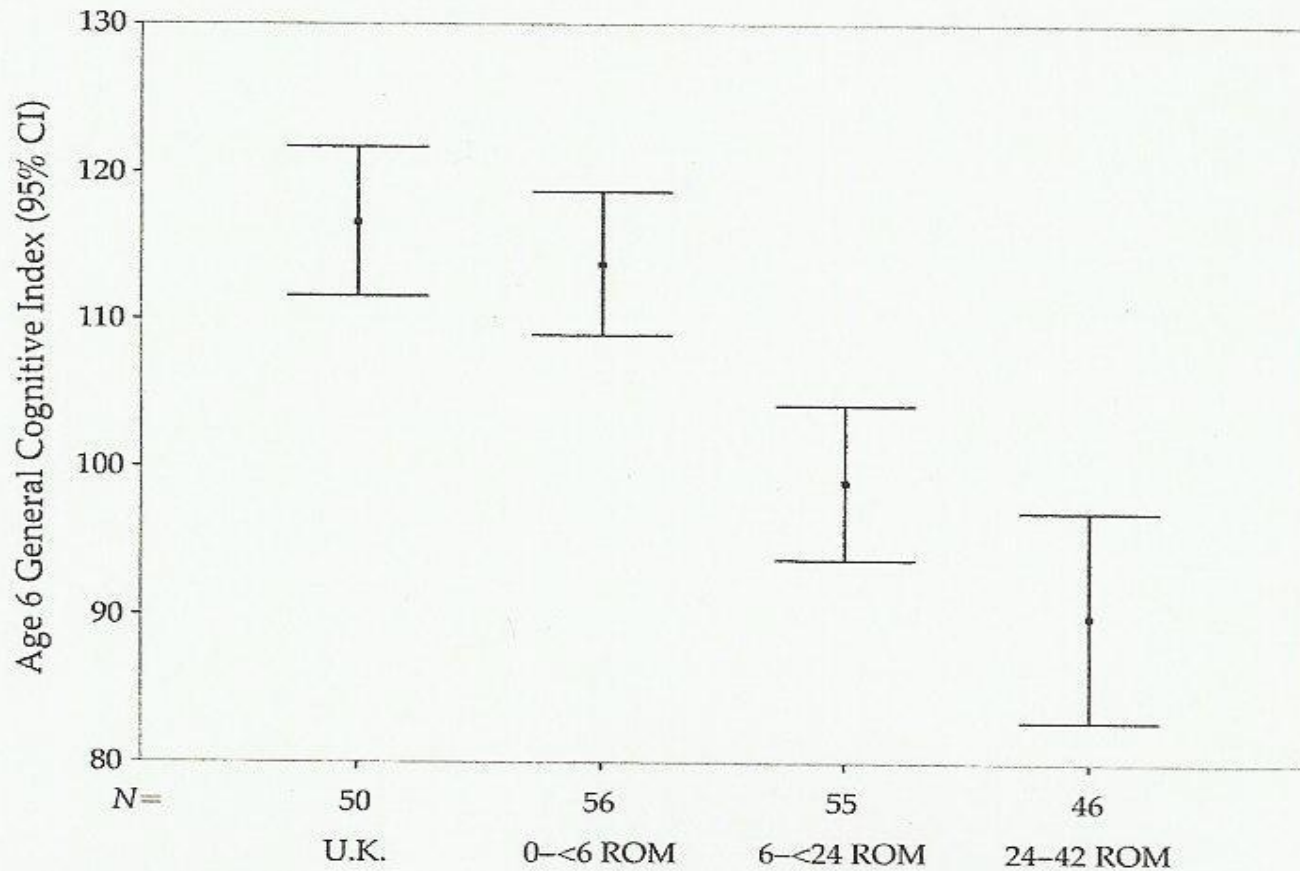
- **Maturational processes “expect” critical environmental stimulants (e.g., patterned light; language; movement and touch)**
- **Brain growth is also shaped by typical and atypical experiences (e.g., stress)**
- **These experiential influences begin prenatally, and the earliest are most foundational**



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**