

Transition to Middle Childhood

Age of Reason and Responsibility



Child under 7 must be accompanied by an adult

“The 5 to 7 shift”

- Increased responsibility for tasks
- Less supervision
- Direct instruction

Components of the transition

- Physical changes
- Neurological changes
- Cognitive changes
- Specific experiences

Physical Changes

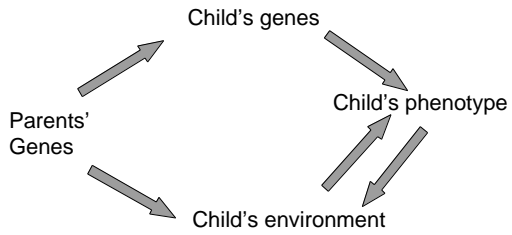
- Rapid growth
- Weight gain
- Body strength
- Agility
- Fine motor control





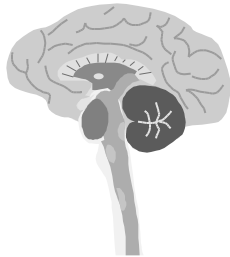
And the lose their teeth!

Recall:
Evocative Gene-Environment Interactions



Neurological Development

- Electrical activity
- EEG dominant type coherence



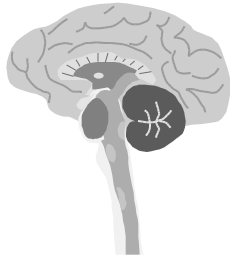
Stauder et al., 1993

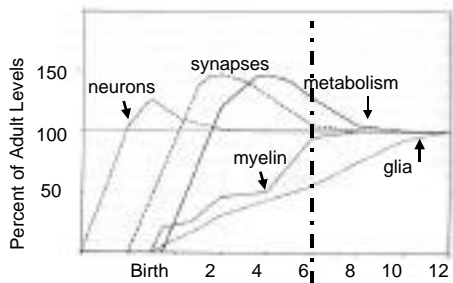
- Conservers and nonconservers
- Ages 5 to 7
- ERP
- no diff on "oddball" task
- diff on conservation task



Neurological Development

- Myelination





From Janowsky & Carper, 1996

Note:

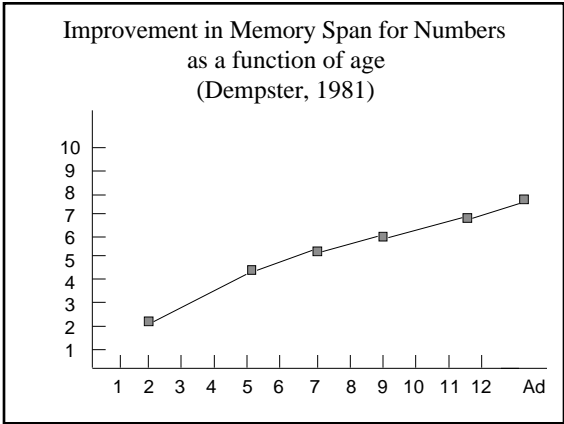
- EEG/ERP with kids is tricky
- Many possible interpretations
e.g., myelination (threshold or stabilization?)
- And, as always...



Be wary of correlational data

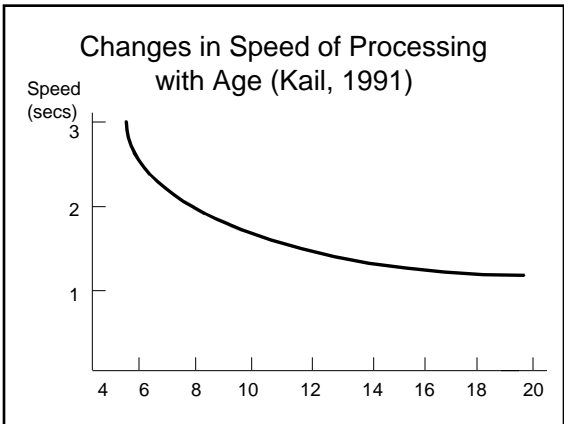
Cognitive Changes

- Memory Span
 - Speed of processing
 - Knowledge Base
 - Memory Strategies
 - Metamemory
- Inhibitory control



Why the change?

- Speed of processing
 - Cross-cultural research
 - Chinese vs English
 - Word length Study
 - Retrieval Studies



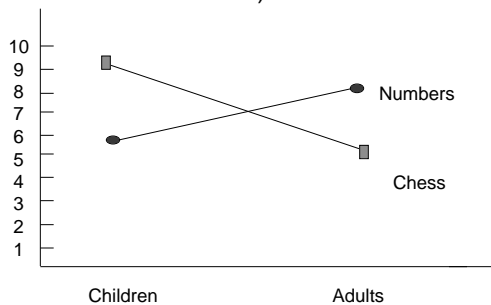
Also changes in:

- Familiarity with numbers
- Speed can say them

World Knowledge

- What is the most unmusical band in the world?
- A RUBBER BAND!!!!!!
- Why did the one-armed man cross the road?
- TO GET TO THE SECOND-HAND SHOP!!!!!!

Immediate Recall for Chess Pieces and Numbers: 8- to 10-yr-olds & adults (Chi, 1978)



the more you know...

- Information organized better
- Frees up capacity so can process more information
- Allows for more “executive” processing
 - Metacognition
 - Planning
 - Attention

Also changes in:

- Knowledge about memory strategies
- Selection of strategies

Strategies

- Rehearsal
- Organization
- Mnemonics
- Elaboration

Metamemory

- What is easy/hard to remember
- How well they can remember
- Which strategy to use in different situations

What brings about memory changes?

- Increase in speed of processing & capacity
- Increase in knowledge
- Acquisition of strategies for remembering
- Metamemory

Age or Experience?

- Unschooled children and adults rarely use strategies on "lab" tasks

Rogoff & Waddell, 1982