

Attention, Perception, and Memory

- I. Attention, Perception, and Memory
 - A. Significant changes occur roughly between 5-7 years of age with all 3 cognitive skills
 1. Influence of schools or brain growth?
 - a) Start kids in school 5-6 - formal education - into transition they need skills for formal education like "paying attention"
 - b) Lot of development in the frontal area of brain - "executive processing"
 - (1) Monitors us, tells us to pay attention - this really transitions between 5-7
 2. Growth of Attention
 - a) Sustained Attention: Being able to pay attention to something even when you don't want to (forcing yourself)
 - b) Distractibility: Ability to block out distractions and keep focus
 - (1) Kid watching tv really close with legs crossed and mom calls him and he doesn't budge
 - c) From capture to control: Listening to lecture instead of listening to conversation next to you
 - B. Attention Deficit Disorder: Kids by 7 can't do these things
 1. Like listening to 50 radios at once and trying to hone in on 1 station
 2. Can't keep focus on one thing, can't even when you try to
 3. Doesn't mean they are not smart
 4. It is over diagnosed
 5. Medicated to diagnose but sometimes can affect appearance of looking younger
 - C. Perceptual Development
 1. Perception of Distinctive Features
 - a) Things that look different to an adult and perceived as identical to each other by young children
 - b) Can be seen in problems associated with learning to read
 - D. What causes reading disabilities?
 1. May be due to visual perceptual problems
 2. May also be due to difficulties distinguishing phonemes
 - a) Example: night rate vs Nitrate
 - b) Research to improve phoneme discrimination abilities
 - E. Meta-Cognition
 1. More generally, young children have more limited meta-cognitive or executive processing skills
 2. Kids will buy into anything, won't question much
 3. Not imposing logic
 4. Don't care if they have wrong answers
 5. Don't have overview of how memories and mind works
 6. Kids get better at it from 5-7 from education
 - a) Doesn't know the most efficient way to study
 - b) Should we enforce it in school???
 7. Parents in dilemma do not want your kid to be the slowest in kindergarden but don't want to start early

- a) Better off holding them back ideally, however in US, we push our kids and do the opposite
- 8. Don't have an A and B pool in pre school for kids that are recognized to not be ready to start at that level
 - a) Due to economics and because parents want their child as conformed as possible
- F. Memory Development
 - 1. Recognition Memory
 - a) Is good at an early age with little developmental change
 - 2. Deliberate Recall Memory
 - a) Example: Remembering a list of words or numbers
 - b) Adults typically remember 5-9 items in short term memory. In comparison, young children are much worse. They improve significantly past 7 years
- G. Meta-Memory
 - 1. Young children have poor meta-memory skills: They don't understand how their memories work
 - a) They don't rehearse items
 - b) They don't understand limits of memory
 - c) They don't use categorization and other mnemonics
 - 2. More generally, young children have more limited meta-cognitive or executive processing skills
- H. Children's Natural Memories
 - 1. Like adults, children tend to remember the "gist" not the detail, and tend to make up details that are most logical
 - 2. Unlike adults, young children often don't understand the gist because of limited knowledge
 - 3. Unlike adults, young children are more prone to make up facts
 - a) Don't realize they are doing it (younger than 6 are very likely to do it)
 - b) Young children are really bad at eye-witnesses
 - 4. Implications for eye-witness testimony
 - 5. Movie - natural type of memory not worrying about detail, pay attention to the logistics
 - 6. Kids memories aren't that good because they don't understand the situation
 - 7. What are the implications for eye-witness testimony from young children?
 - a) Totally inaccurate
 - b) Will say things that they claim are memories and will continue to
 - 8. Concern is with situation such a child abuse/neglect
 - a) Inaccurate
 - b) Will continue to say the same thing believing its a memory but its not
 - 9. Research on visiting the doctor