

11/13 MEMORY, EXECUTIVE FUNCTION (ch 12)

- o Retrieval
 - Hippocampus: pattern completion
 - Prefrontal: retrieval attempts, no success (initiation)
 - L parietal lobes: spatial context (place)
- o Working Memory
 - KF: lesion in temporal parietal- input/output phonological buffer
 - Central Executive
 1. Phonological buffer: stores verbal info in working memory (2 seconds)
 - 2 seconds exhale to speak
 - 2 +- 1, uses sketchpad to remember
 - irrelevant speech effect: phonological buffer engages with speech
 2. Visual spatial sketchpad

EXECUTIVE FUNCTION

- o Controlled vs automatic processes
 - Gain skill becomes automatic (proceduralization)
 - semantic to procedural memory
 - Contention scheduling: (automatic) behavior leads to another, serial events
 - Supervisory attention scheduling: effortful attending to something
- o Frontal lobe damage = difficulty with new behaviors
 - Environmental dependency syndrome: automatic process (washing dishes) operate on habit
 - Preservation: doesn't stop until task is finished
 - WCS (Wisconsin card sorting task) items on card vary in number, size, color, shape. Sorting rules are arbitrarily changed. Those with frontal damage continue with first sorting rules (perseverance) never switch, no update to new rules.
 - Problems with goal directed behavior
 - Psychological inertia: no behavior until prompted, doesn't stop behavior until prompted to stop.
 - Verbal Fluency: persevere with few "S" words they started with
 - Attentional set
 - Sequencing problems
 - Tower of Hanoi/London: transfer ascending size rings, 3 poles, 1 pole.
 - Self-monitoring
 - Inhibition (ex: go/no go) cannot inhibit response