Long-term memory: Kinds and tests

Kinds of memory

• Declarative (a.k.a. explicit) memory
  – “Knowing that”
  – My 10th grade teacher was Miller
    • Semantic memory
  – I had oatmeal for breakfast
    • Episodic memory

Kinds of memory

• Procedural memory
  – “Knowing how”
  – Cognitive: How to read, how to integrate or differentiate (calculus)
  – Motor: How to type, shoot a slapshot
  – Perceptual: chicken sexing, chess
  – E.g., a top quarterback has skills in all categories

Kinds of memory

• Implicit memory
  – Memory that you are not conscious of

Ways to test memory

• Recall
  – Who was your 10th grade math teacher?
• Recognition
  – Was Miller your 10th grade math teacher?
• Both test declarative/explicit memory

Ways to test memory

• Word stem completion
  – Write the first word you can think of that starts with these 3 letters:
    • Reh ...
  – Word frequencies:
    • Rehearsal: 4 uses per million words
    • Rehabilitation: 22 uses per million words
    • Word frequency predicts one answer, repetition priming the other
Ways to test memory

- Lexical decision task
  - As fast as you can, decide whether the following is a word or not:
    • *Frologrock*
    • *Rehearsal*
  - You would say “yes” faster for rehearsal than for an unprimed word
  - Used to test, e.g., implicit attitudes

Clive Wearing

- Eminent musician and musicologist who caught a bug that ate his hippocampus
  - And nearby regions of his frontal lobes, which modulate signals from amygdala

Clive Wearing

- Kinds of memory:
  - Declarative/explicit?
    • Some older semantic memory intact
      - His wife’s name
  - Procedural?
    • Playing piano, making coffee
    • Language
  - Implicit?

Exam

- Multiple choice was out of 36 points
  - Score and your responses in email from scoring office
- Short answer was out of 14 points
  - Score: circled number at top of last page
  - “.-0” or nothing = full points for that question
- Key will be posted on course website
  - If you have questions, check then key first, then check with me

Exam

Score / 50
Mean = 36.5