Improving Your Memory

How to remember not to forget!

"I have a good memory for most things - it's only facts that throw me."
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Memory and Aging- What is Normal?

• Alzheimer’s vs. stroke vs. depression vs. normal aging – acute vs. gradual loss
  • “senior moments” vs. do they become more frequent or persist? Memory loss does not define AD, failures in judgment do so
  • *Persistent* forgetting who/where you are, *repetitive* questioning
  • *Persistent* inability to ID common objects
  • AD preceded by *mild cognitive impairment*- memory loss that does not impair daily functioning
  • A lack of physical exercise, brain injury, low B12, low thyroid function, lack of mental exercise/social engagement, anesthesia, sleep apnea, concussions, cardiovascular disease, diabetes, family history all *heighten chances* of AD
  • Dysfunctional fear of AD is counterproductive
What memory is

- **Memory structures**
  - **Sensory memory** – rapid decay (1/2 sec.) - preattentive, little decline w/ age
  - **Primary memory** - limited to what can consciously be retained at present (3-7 bits of information)
    - **Active** (digits in reverse order) and **passive** aspects (digits in same order) - greater declines for active aspects
  - **Secondary memory** - picks up when limits of primary memory have been exceeded - age deficits are common; these reflect how information is processed
  - **Tertiary memory** - unlimited capacity, age declines reflect datedness and personal meaningfulness of material
What memory is

• Memory processes

Registration – does the info exceed your sensory threshold?

Encoding – the meaning you assign to info

Storage – how such info is organized

Retrieval – getting the info out of storage

These are cumulative and affect one another
• Two keys to memory improvement
  – Your memory skills per se
  – Your attitude
• Practical memory- everyday coping
  – Metamemory- under and over-estimates
  – Memory self efficacy- confidence
  – Memory management- strategies maintaining skills
  – Memory remediation-improvement
  – Age associated memory impairment (see handout)
  – How much of this decline could be eliminated?
Memory and Emotion

• Memory improvement and memory loss are cyclical
• Regarding memory difficulties:
  – Experience with failure leads to negative self statements
  – Self statements lead to emotional reactions
  – Emotional reactions lead to lack of self confidence
  – Loss of self confidence leads to further disuse of available skills
  – Attitude is everything!
Points to keep in mind about memory

• Everyone experiences memory difficulties from time to time
• With age, memory does NOT necessarily decline – you have control over whether your memory fails or not
• Memory difficulties are episodic - they vary by persons, times, and materials (e.g. declarative vs. procedural memory)
• What is normal or abnormal about memory aging is very important
Assessing Your Memory Skills

- The impact of stress
- The impact of depression and anxiety
- The impact of medications
- The impact of illness/fatigue/poor nutrition
- The impact of sensory loss—denial is key
- Rely on multiple senses if at all possible
- Conduct a self-assessment (Be honest!)
- Decide what is important enough to remember
- Do not multitask
Things you can do to improve your memory

• Get organized!
• Accept that you will have difficulty from time to time in recalling things that you have done or will need to do
• Improve your attitude about life and about the use of your skills- be proactive
• Keep calm, relax, go slowly
• Concentrate on 1 thing at a time- be attentive and present
• Take notes, use reminders, calendars
• Take care of your health/be active/get adequate sleep
• Sugar, caffeine, alcohol are bad influences on memory
Improving your memory

• Be sure you understand what you need to remember

• Listen carefully, pay attention, ask others to say things again, more loudly, slower, or in a different way

• Rely upon multiple sources of info if possible

• Material that is new, difficult, complex, or more rapidly presented is going to be more difficult to learn and recall

• Be realistic- you are going to fail from time to time; improvement takes time!
Improving your memory

• Using memory “tricks” if you can
  – Acronyms (KISS)
  – Visual or auditory images (a picture of a cat and a dog-cat/dog food)
  – Method of loci- a journey you take daily
  – Pairing rehearsal and visual/aural stimulation (waiters do this)
  – Overlearning- repeating memories
  – Pay attention to that which you want to remember-selectively listen
  – Focus on the meaning, not the sound of words in recalling them-search for associations
  – Rehearse/associate with something you already know
  – Meaningful associations “Bert and Ernie, Hayslip rhymes w/payslip
  – Production effect- saying, mouthing silently or writing yields better results than does reading
More Tips!

- **First letter cues** – e.g. DATE- Doctor Appt Tomorrow Early/CAT- Catsup, Apples, Tomatoes
- **Peg words** e.g. One Son, Two Sue, Three Sea, Four Door, Five Hive
- **Chunking** – e.g. a social security number, 763-49-3398 (7 +/- 2 items- STM capacity)
- **Categorizing** – e.g. fruits, vegetables, dairy products, cleaning supplies
- **Create a story** e.g. begin with.. “old MacDonald had a farm…”
- **Active observation** - pay attention to details
- **Create a word** – “I heard a quacker on the way to the store” (duck image) - crackers
- **Rhyming** – My car will shine at nine---I’ll write with my pen at ten
- **Meaningful and unique associations** (1092601, Super Dave)
- **Visual Images** – e.g. cousin fred- freduccini, Mrs. Hammerville, dog and cat food
- **Spaced retrieval learning** – learn something, create a time space, recall it, increase the time
- **Mnemonics** – “i before e except after c” “30 days hath Sept- April, June, and Nov- all the rest have 31 except Feb"
- **Mnemonics** – “My very educated mother just served us nachos”- the planets (minus pluto!)
- **Mnemonics** – “She Makes Harry Eat Onions”- Great Lakes (Superior, Michigan, Huron, Erie, Ontario)
- **Create an acronym** to remember grocery items (better if it is a real word) - MINT (meat, ink, navel oranges, tea)
- **Memory is associative**- strengthen those associations! Start w/ something that is meaningful “Good Night Irene”
- **Be economical**- use memory aids whenever possible, realize rote memory is OK too

- **Challenge yourself daily**- introduce variety into everyday routines, look for opportunities to develop/use your skills
- **Stay positive**! Focus on what you can do, not on what you cannot do
- **Take care of yourself** physically, emotionally, and spiritually
- **Stimulate yourself mentally daily** (e.g. watch Wheel of Fortune, Jeopardy, listen to NPR)
- **Intense physical activity** may create new cells in the hippocampus, brain exercises create new interconnections