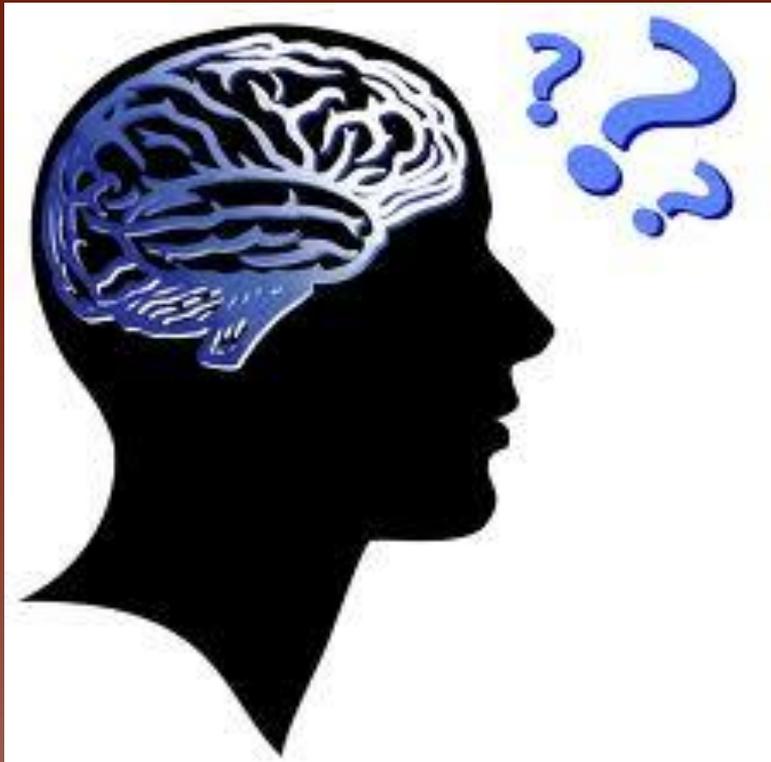


Memory

What happens when things go wrong?



Problems with Encoding

◎ Anxiety

- > Thoughts in one's head racing
 - About what others are thinking, about what to say next, about how attractive or famous the person is
- Social Anxiety Disorder / Social Phobia
 - Chronic, persistent fear of ridicule by others during social situations
 - Freezing up
 - Panic attacks
 - Blacking out
- > Decreases attention, increases interference

Problems of Encoding

◎ Lack of attention and distractions

> ADHD

- Studies show inconsistent ability with short-term memory compared to others
- “Noise in my head”

> “Multi-tasking” – technology, interruptions

- Ruins attention and increases interference



Problems with Storage



◎ Stress

- > **Stressor timing**
 - Can interrupt encoding or storage = increase interference
- > **Stressor duration**
 - Can cause permanent deficits with encoding = increase interference, decrease in attention
- > **Stressor intensity**
 - Extreme threats like trauma or natural disasters = decrease in attention, increase in interference, and decreases retrieval

Problems with Retrieval

- Two competing theories:
 - > Memory Decay (short-term)
 - The further in time people get from the actual memory, the more the details fade away
 - > Memory Interference
 - Other experiences and other memories have been made (interfere) between the first memory and its retrieval
- Are eyewitness reports reliable? Should they be weighed differently in court?

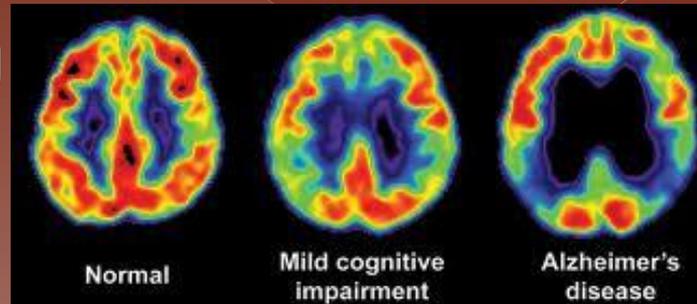
Dementia



- Loss of cognitive functioning over a long period of time in a previously unaffected person
 - > Usually because of aging
 - > Occasionally because of head trauma
 - > Sometimes because of Parkinson's or Huntington's Disease
- Symptoms include
 - > Memory impairment or loss
 - > Disorientation
 - > Language, planning, organizing disturbances

Alzheimer's Disease

- ◎ A kind of Dementia
 - > Usually because of aging (over 65)
- ◎ Symptoms include
 - > Begins with difficulty remembering recent events
 - > Progresses over time:
 - Memory deterioration
 - Disorientation
 - Loss of all bodily functioning
 - Death



Physical Impairments

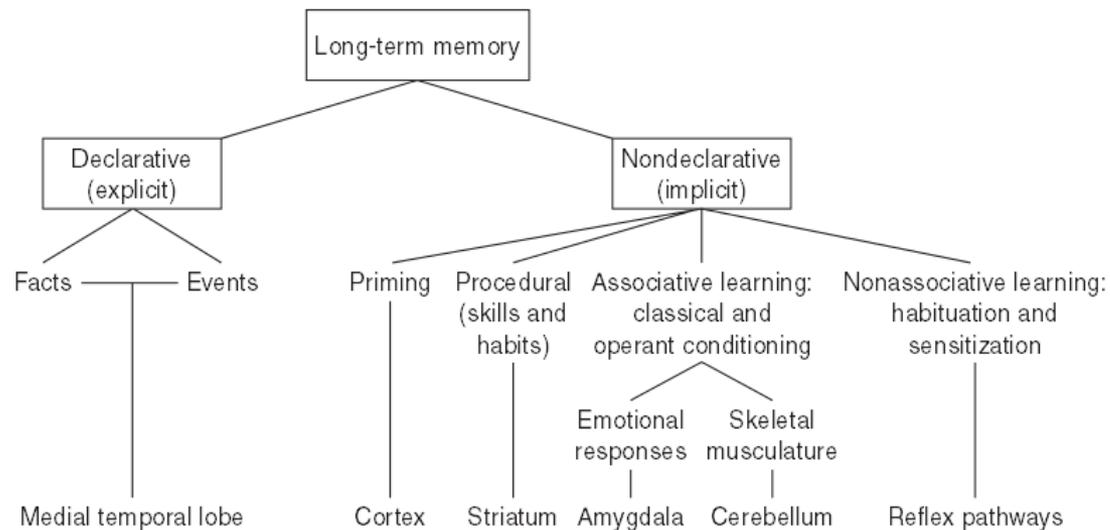
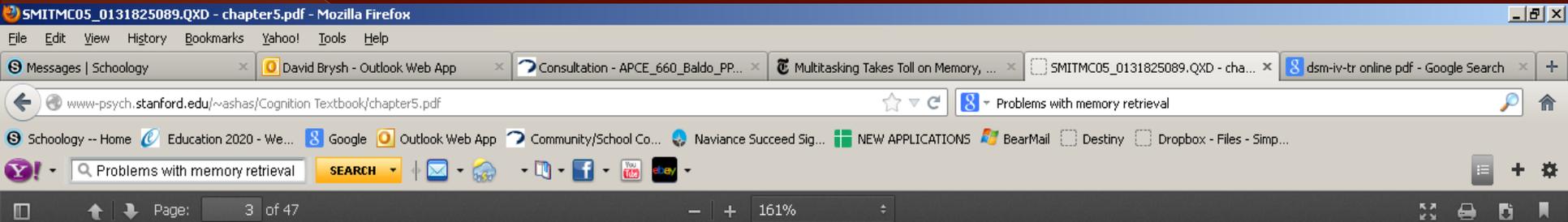


FIGURE 5-1 The organization of long-term memory

Forms of long-term memory can be classified as either declarative (explicit) or nondeclarative (implicit). Declarative and nondeclarative memory depend on different brain regions.

(Kandel, E. R., Kupferman, I., and Iverson, S. 2000. Learning and Memory. In: E. R. Kandel, J. H. Schwartz, and T. M. Jessell (eds.) *Principles of Neural Science*, pp. 1227–1246. New York: McGraw-Hill, Fig. 62-4. Reprinted with permission.)

How to Strengthen Memory

● Cues

- > Connect the info. to senses, especially visual cues

● Repetition

- Seeing and hearing info. repeatedly over a span of days or weeks (20 times)
- > Mnemonic devices can combine cues and repetition

● Teach the info.

- > By far the best way to remember
- > Uses cues, repetition, creative connections

References

- Kandel, E. R., Kupferman, I., and Iverson, S. 2000.
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