Conservation of quantity

- Understanding that quantity is conserved under certain transformations
  - Develops around age 5-6

Raven’s progressive matrices
A test of reasoning ability (fluid intelligence)

Exam 2

- Will cover Chapters 7-10, 12, and 14
  - “Personality, family influence” from today will be on Exam 3, not Exam 2
- Format:
  - 30 multiple choice (1 point each)
  - 8 short answer (points vary)
- Will not cover:
  - Types of ambiguity

Multiple-choice questions

- 30 total
  - 17 on material discussed in class and in the book
  - 8 book-only
  - 5 class-only

Effects of cognitive aging

Chronicage age (in years)
Multiple-choice questions

- Distribution of class-and-book questions:

<table>
<thead>
<tr>
<th>Chapter</th>
<th># of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Total:</td>
<td>17</td>
</tr>
</tbody>
</table>

Multiple-choice questions

- 8 book-only questions:
  - Spontaneous recovery
  - Effects of extrinsic reward on motivation
  - How money functions as reinforcement
  - What H.M. could and couldn’t remember
  - Memory in expert vs. novice chess players
  - Levels of language (phonemes on up)
  - Learning of superordinates and subordinates (language)
  - Sequence of stages in Piaget’s theory of development

Multiple-choice questions

- 5 class-only questions:
  - Nature of patient Eliot’s disability
  - Results of inverted text reading study (Kolers, 1975)
  - How information is lost from visual sensory memory
  - What it means for a test to be “99% accurate”
  - Presentation of Broca’s vs. Wernicke’s aphasia

Short-answer questions

- Know the homeostatic model of drug tolerance
  - Sources: class, Figure 7.15 and related text
- Bransford & Johnson (1972), from class
  - Know how the conditions differed, and the pattern of results
- Draw and label the stage theory of memory

Short-answer questions

- Label the boxes in the taxonomy of long-term memory
  - E.g., “Explicit,” “Episodic,” “Procedural”
  - And give an example of each box along the bottom
  - Sources: class, Figure 8.20 and related text
- Identify use of anchoring-and-adjustment heuristic and loss aversion bias in a scenario
  - I’ll give you the scenario

Short-answer questions

- Label language areas of the brain, know the “leopard-lion” example
- Write a garden path sentence that has the same structure as While Anna bathed the baby spit up on the bed.
  - I’ll give you a topic
- Know what happened in the shape game vs. color game example
Personality, family influence

Will be tested on Exam 3, not Exam 2

Personality traits

- Traits:
  - Relatively stable patterns of thought, feeling, or behavior that characterize someone
- The Big Five
  - Openness to experience
  - Conscientiousness
  - Extraversion
  - Agreeableness
  - Neuroticism

I see myself as someone who...

Personality is ...

- Fairly heritable
  - Shared genes predict shared traits
- Fairly stable across time
  - Example: Ability to delay gratification at age 4-5 predicts lots of good outcomes
- But still shaped by lots of factors
  - Including the situation

Influence of family on personality

- Siblings share genes and environment
  - Factors that should make siblings similar
- Are there also family-related factors that make siblings different?
Sibling contrast effects
(Schachter et al., 1978)

- Participants: 45 3-child families
  - Mean age of kids = 6.4 years (SD 3.7)
- Each mom was asked to characterize her kids, pair-wise, as same or opposite
  - 1st- vs 2nd-born (first pair)
  - 2nd- vs 3rd-born (second pair)
  - 1st- vs 3rd-born (jump pair)

Rivalry reduction hypothesis

- The more similar siblings are, the more they compete for resources
  - So parents try to amplify differences
- One mechanism that could amplify differences:
  - Gene-environment correlation