

Quiz #6

Name: _____

1. What was your favorite section topic this term? Describe two things that you thought was interesting from that section topic [2 pt; Any]. To refresh your memory, we have discussed:

- Perception,
- Attention (Days 1 & 2),
- Emotion (Days 1 & 2),
- Language,
- Working Memory / Cognitive Training,
- Long Term Memory: Structure,
- Long Term Memory: Processes & Mechanisms,
- Autobiographical Memory,
- Knowledge / Categorization,
- Decision-Making,
- Motivated Reasoning,
- Cognitive Biases,
- False Memory,
- Misinformation,
- Collective Memory,
- Creativity & Problem-Solving,
- Learning & Motivation,
- Imagery,
- Education (yesterday & today).

Use the blank space to the right of the bullets for #1. **This is a pretty broad topic, and if I put an answer key for “everything” covered, it’d be pretty long. I accepted most things here, as it was meant to be informative for me as the professor (i.e., “what stuck” with people).**

2. Hard et al. (2019) asked student participants: “(1) What did you learn in Intro Psych that has been useful to you in your other classes? (2) What did you learn in Intro Psych that has been useful to you in your life in general?” Can you answer these questions, but as they relate to this class, Intro Cog Psych? [1 pt; Education]

Same – there is no real right or wrong answer here (unless the student literally didn’t answer this question in relation to cog psych).

3. Which of these is NOT true of insight? [1 pt; Creativity & Problem-Solving]

- A. It is part of the information processing approach to problem-solving**
- B. Overcoming functional fixedness is one example of it
- C. It is defined as the sudden realization of a problem’s solution
- D. It is thought to be preceded by restructuring the initial representation of the problem

4. According to the information processing approach to problem solving, the purpose of subgoals is to [1 pt; Creativity & Problem-Solving]

- A. Bring the problem solver closer and closer to the goal state**
- B. Create insight
- C. Move the problem solver directly from the initial state to the goal state
- D. Avoid the need to perform a means-end analysis

5. Which of the following is NOT evidence for perception and imagery sharing similar cognitive mechanisms? [1 pt; Imagery]

- A. fMRI studies showing that when you're perceiving whether the stripes in one quadrant are longer than others activates similar brain regions as when you're relying on your mental image of the stripes display
- B. TMS studies showing that participants have performance decrements across perception and imagery when targeting the same brain region (e.g., visual area)
- C. A neuropsychological patient who, after a surgery to remove part of her visual cortex, needed to mentally walk farther before an image filled her visual field
- D. Neuropsychological patients who have separate brain regions that are lesioned, but who show deficits in perception but not imagery, and imagery but not perception**
 - a. This is the definition of a double dissociation, which we went over, and which suggests that the two would be separate, not similar, cognitive mechanisms.**

6. Which of the following has been used as an argument AGAINST the idea that imagery is spatial in nature? [1 pt; Imagery]

- A. The results of scanning experiments
- B. Depictive representations
- C. The tacit-knowledge explanation**
- D. The distinction between propositional and spatial representations

7. Describe one concrete difference between collective memory and history and one example of how this was exemplified in the paper discussing collective memory of WWII [1 pt; Collective Memory].

- Collective memory involves an identity project, whereas history is actually meant to be objective about the past (regardless of identity)
- Collective memory is impatient with ambiguity, whereas history recognizes complexity and ambiguity
- Collective memory ignores counter-evidence to preserve established narratives, whereas history may revise existing narratives in light of new evidence
- Collective memory relies on schemas, scripts, implicit theories that simplify the past and ignore findings that don't fit into the narrative, whereas history is constrained by archival materials
- Collective memory is conservative and resistant to change, whereas history can change in response to new information.

The WWII paper shows this distinction that people from different countries can have broad general knowledge of events in WWII (the test they took), but still, if you asked them about "core events" or the most frequently named events, they would name the ones that most shaped their country's perspective. E.g., Russians naming things like Battle of Stalingrad and Western allies naming things like D-Day.

8. Describe what prediction error is and how it might be used to study curiosity (like, for example, in the Marvin and Shohamy paper we discussed) or decision-making related topics (like, for example, if you applied the concept to other research) [1 pt; Learning and Motivation].

Prediction error is the difference between an expected and actual outcome. In the Marvin and Shohamy study, they looked at the difference between satisfaction with the answer to a trivia question and their curiosity about the answer before knowing what it was. They use this information prediction error to look at how it impacts memory. People typically look at prediction error in relation to decision-making research to see what makes people "subjectively value" certain outcomes and how the brain learns to predict and values information that we use

to make decisions.

9. Describe one educational intervention that we discussed either today or yesterday: what is it and how does it work? [1 pt; Education].

On the last day of class, we talked about different papers that highlight how allowing laptops in class is often thought to result in worse overall grades.

The previous day, we talked about an email meant to normalize test-anxiety, having a self-transcendent purpose, the testing effect, self-control strategies, and a values affirmation intervention. We also discussed a podcast on how to make study groups more effective.