

Quiz #4

Name: _____

1. Describe two explicit effects or trends that we went over in class or in the papers that you read that are consistent with the idea that memory is a constructive process. What does it mean for memory to be constructive, and what are two effects/trends that point to its constructive nature? [2 pt; LTM processes/Autobiographical Memory]

Memory being constructive means that each memory is a combination of someone's knowledge, experiences, and expectations. Shute (2014) went over the idea of how our memories are constantly updated whenever we retrieve them. Retrieval as an act brings the information into our working memory, and we piece together the memory from the details we brought. However, this process also allows for new details to be reconsolidated into the memory.

We talked about several effects that demonstrate how memories are constructive. For instance, in the podcast about highly superior autobiographical memory, the girl talks about carriages and cars and things that she wouldn't have known about at the time, but clearly through rehearsal she has put together the details of the memory. Perhaps flashbulb memories could be viewed as an example of constructive memories, given that participants report that these memories are very vivid and participants are usually very confident about what these memories entail, even though they decay in detail over time just like regular memories. At least, I accepted some answers that mentioned flashbulb memories.... We went over two papers that were also examples of constructive memory: Stanley et al. (2017), Rubin et al. (2019). We talked about propranolol and studies on consolidation, etc. We talked about fictional first memories.

2. Which of the following about proposed explanations for the reminiscence bump is NOT accurate? [1 pt; Autobiographical Memory]

- A. The self-image hypothesis suggests that the reminiscence bump occurs because assuming our identities will lead to enhanced memory.
- B. The cognitive hypothesis suggests that the reminiscence bump occurs because encoding is enhanced during periods of rapid change that are followed by stability.
- C. **The narrative rehearsal hypothesis suggests that the reminiscence bump occurs because the repeated viewing or rehearsal of events through media such as television promotes greater recall.**
 - a. Narrative rehearsal was an explanation for flashbulb memories, not the reminiscence bump
- D. The cultural life script hypothesis suggests that the reminiscence bump occurs because our life stories are easier to remember when they fit with cultural expectations.

3. What is one difference between the behavior of those who have highly superior and severely deficient autobiographical memory? [1 pt; Autobiographical Memory]

HSAM: very detailed memories of mundane events; possibly superior recall and possibly constantly constructing and reminiscing on her memories; also experiences a lot of issues associated with having so many memories (like anxiety, asking people for advice, and they won't remember, but she remembers), etc.

SDAM: impaired episodic retrieval, particularly for visual information; learning and memory were otherwise intact, as long as tasks could be accomplished by non-episodic processes. Delayed complex figure recall was poor, production of internal details on autobiographical

memories really terrible.

4. Which of the following statements about proposed approaches to categorizing items is NOT accurate? [1 pt; Categorization/Knowledge]
- A. High-prototypicality items are responded to more quickly than low-prototypicality items, most likely due to priming.
 - B. Determining an item's category membership can allow you to make inferences about that item's other characteristics without having to observe those characteristics yourself.
 - C. The definitional approach is not likely to be used, because it is too strict to map onto the real world.
 - D. Exemplar categorization probably tends to occur for categories with many members, whereas prototype categorization probably occurs for categories with fewer members.**
5. Pick a category of objects. Describe one difference between how a semantic category network approach and a connectionist model approach would represent the stored knowledge [1 pt; Categorization / Knowledge].

If we take the example from class about birds, we know that the semantic category network would organize knowledge about birds in a hierarchical fashion, such that animals goes to birds and birds go to robins, etc. and there'd be shared properties (cognitive economy) at the bird level that is inherited by the branches below (robins, canaries, etc.). Meanwhile, concepts or categories are organized in a distributed fashion in the connectionist model such that the pattern of activation across a number of nodes (or neurons) is going to represent each concept. There are, of course, many other examples for how they might differ; this is just one, and anything reasonable works here.

6. Describe what expected utility theory predicts and two explicit effects or trends that we went over in class or that were in the papers you read that are inconsistent with people acting in line with an expected utility theory. [2 pt; Decision-making]

Expected utility theory suggests that people are going to try to maximize their utility (in many cases: money). We went over several examples of people acting inconsistently with expected utility theory: choosing the bowl with a worse odds of getting the red pill; gambling; the ultimatum game; temporal discounting; and other effects that suggest things BEYOND greatest amount of money can impact decision-making (risk, framing effect, expected and incidental emotions). Even the papers talk about how other factors can impact our decision-making (e.g., the severity of a crime impacting how much the phrase "innocent until proven guilty" is actually true for some folks; implicit norms impacting how much we report/not report robbers, etc.).

7. Check **all** the statements that are **true** about the findings of Pearson et al. (2018) (crimes), Rubin et al. (2019) (scenes), Stanley et al. (2017) (counterfactuals), and Pryor et al. (2019) (norms) [2 pt; readings]

- A. Pearson et al. (2018) suggests that innocent until proven guilty is not entirely accurate because of the cognitive biases that we hold about crimes of different severity.**
- B. Pryor et al. (2019) suggests that people follow arbitrary norms because they use the percentage of people who are similarly-minded as an anchor to guide their hypothetical decisions on reporting / not reporting a robber.
 - a. **This study sought to rule out an anchoring heuristic explanation of the effects**

with Experiment 2 which changed the percentage that participants saw as part of the implicit norm that was being created.

- C. Stanley et al. (2017) suggests that counterfactual simulations of negative autobiographical memories had no effect on their emotional intensity.
 - a. The counterfactual simulations definitely had an effect on emotional intensity.
- D. Rubin et al. (2019) suggests that all the qualities we typically associate with autobiographical memory, such as reliving, vividness, and belief, are due, in large part, to our ability to imagine the spatial layout of the scene being recalled.