## Midterm Exam 2 – Answer Key

### Short Answer Questions

1. What theory states that amnesia occurs because of difficulties with retrieval processes, as opposed to storage processes? Briefly describe two lines of research that provide support for this assertion. (3 pts.)

**Retrieval Failure Theory** states that amnesia is the result of problems with retrieval (as opposed to Consolidation Theory which claims amnesia is caused by a lack of initial storage).

Two lines of research that support retrieval failure theory include: (1) **delayed onset of retrograde amnesia** (memories are available for a period of time following an amnesic insult, and disappear after a delay – Gellar & Jarvik, 1968; Lynch & Yarnell, 1973), and (2) **reminder treatment effects** (exposing the amnesic to components of the context or original learning can help to “bring back” seemingly lost memories – Hinderliter, Webster, & Riccio, 1975; Hanson, Bunsey, & Riccio, 2002).

2. Drug tolerance can be explained through the use of classical conditioning mechanisms. What is the conditioned stimulus (CS) in classically conditioned drug tolerance? According to this theory, why do habitual drug users experience overdose? (2 pts.)

**Contextual cues** (e.g., room, drug paraphernalia, friends, etc.) serve as the CS in classically conditioned drug tolerance.

Overdose occurs when the individual takes the drug in a **different context** (i.e., without the original CS present) and the compensatory conditioned response (CCR) does not occur.

### Essay Question (10 pts.)

1. List and define the two procedures used in instrumental conditioning to increase desired behaviors and the two procedures used to decrease undesired behaviors. Include in your answer (1) the name of each procedure, (2) a brief definition of each procedure, and (3) a real-world example of each procedure.

<table>
<thead>
<tr>
<th>Procedure Type</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appetitive Stimulus</strong></td>
<td>Present: Presenting an appetitive stimulus leads to an increase in desired behavior (e.g., good report card results in an ice cream cone for the child).</td>
<td>Providing an ice cream cone for a child who gets good grades.</td>
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<td></td>
<td>Remove: Removal of an appetitive stimulus leads to a decrease in undesired behavior (e.g., take away driving privileges for coming home late).</td>
<td>Removing driving privileges for coming home late.</td>
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<tr>
<td><strong>Aversive Stimulus</strong></td>
<td>Present: Presenting an aversive stimulus leads to a decrease in undesired behavior (e.g., swearing results in a child getting its mouth washed out with soap).</td>
<td>Swearing results in soap being rubbed in the child’s mouth.</td>
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<td></td>
<td>Remove: Removal of an aversive stimulus leads to an increase in desired behavior (e.g., taking pain reliever results in headache going away).</td>
<td>Taking pain reliever results in headache going away.</td>
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</tbody>
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Short Answer Questions

1. Describe the Piagetian concepts of *assimilation* and *accommodation*. Give an example of each. (2 pts.)

*Assimilation* – application or transfer of skills to new settings, e.g., grab finger, grab rattle, grab dog’s ear

*Accommodation* – modifying action dependent on environment, e.g., change shape of hand to grab dog ear from hand position used to grab rattle

2. Name and describe two heuristics that people use when making decisions. Illustrate your descriptions with examples. (3 pts.)

The **availability heuristic** describes people’s tendency to generalize from what is easily retrieved from memory. If, when thinking of her friends, mostly women come to mind, a person would draw conclusion that most of her friends are women.

The **representative heuristic** is one’s belief that something should act as representative of the situation. When flipping a coin, one would expect it to come out tails nearly as often as often as heads, instead of heads, say 42 times in a row.

Essay Question (10 pts.)

1. Describe a child’s communicative and linguistic abilities at ages 6 months, 1 year, 2 years, and 3 years. Discuss both production and comprehension abilities. Be sure to mention the major stages of a child’s language development and any major classes of errors that the child might typically make.

At 6 months, the child is mostly **babbling and cooing**. There are differences in the noises they make depending on what they want. They are aware of the language around them and have started to become partial to the sounds of their native language and their parents’ voices.

By 1 year, they have a very small vocabulary and can utter mostly **one word** (usually one or two syllable words). They now only recognize their **native language phonemes**. There is also some **overgeneralization**, all adult males may be called “daddy” or all dogs “spot.” There is evidence that very small children can understand the difference between “the dog hit the cat” and “the cat hit the dog” before they are able to say sentences that complex.

By 2 years, they can string words together in short **two word sentences**, but are lacking in the ability to use function words, such as “the,” “a,” “some” which restricts the creation of larger sentences. Irregular verbs and endings tend to be correct. The vocabulary of the child is also growing by approximately 10 words a day (the **vocabulary explosion**).

At age 3, **overregularization** occurs. Children learn and understand the rules of grammar, but apply them to all words including irregular verbs they had gotten right before. Parents typically cannot correct these errors. This naturally fixes itself.

Throughout language development, comprehension abilities are generally more advances than production abilities.