

## 60553-Conditioning and Learning

### Sample Quiz Questions

(1) A patient suffering from an anxiety disorder described the psychological sequelae from a car accident she had while driving on a part of town where she had never been before. When driving by the same street intersection months later, she experienced a panic attack. Identify the components of this situation using conditioning terminology (e.g., CS, CR, etc.). Use arrows to represent their temporal relationships.

(2) Hull (1931) describes an anecdote that goes like this: “A man and woman were leisurely eating their dinner [in a Boston restaurant]. Sitting bolt upright at the table on a third chair was a handsome bull terrier. Throughout the meal the dog watched his master and mistress consuming the tempting morsels without himself making the slightest overt instrumental act leading to the obvious goal. [...] After a time, however, [...] a long, thick thread of saliva was observed hanging from each corner of the dog’s mouth.” What central concept in Hull’s theory is this anecdote supposed to illustrate?

(3) Nagaishi & Nakajima (2008) reported an experiment with this design:

Group	Phase 1	Phase 2	Test
LI+OV	$N \rightarrow W$	$N \rightarrow S \rightarrow + / W \rightarrow W / \text{Rec}$	N?
LI	$N \rightarrow W$	$N \rightarrow W \rightarrow + / W \rightarrow S / \text{Rec}$	N?
OV	$W \rightarrow W$	$N \rightarrow S \rightarrow + / W \rightarrow W / \text{Rec}$	N?
Control	$W \rightarrow W$	$N \rightarrow W \rightarrow + / W \rightarrow S / \text{Rec}$	N?

Which group/s would you expect to exhibit the highest suppression (i.e., strongest conditioning) of NaCl intake and of sucrose at the end of Phase 2?

For NaCl (N):

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For sucrose (S):

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(4) Calculate the Rescorla-Wagner prediction for the first trial of Phase 2 (compound phase) of a overexpectation effect experiment ( $A+, B+ / AB+$ ). Assume the following parameters:

$$\alpha_A = 0.5$$

$$\alpha_B = 0.1$$

$$\beta = 0.8$$

$$\lambda = 100$$

$$V_A = 80$$

$$V_B = 80$$