

Objective

Key
People

Rescorla

Wagner

Garcia

- Students will connect John Garcia to CC by reviewing One-Trial Learning and the *Garcia Effect*.

Warm Up

- **1. How have your emotions or behaviors been classically conditioned?**

Warm Up

1. The first experimental studies of associative learning were conducted by
 - a. John B. Watson
 - b. B.F. Skinner
 - c. Albert Bandura
 - d. Ivan Pavlov
 - e. Edward Deci

2. Who introduced the term “behaviorism?”

- a. John Garcia
- b. B.F. Skinner
- c. John B. Watson
- d. Albert Bandura
- e. Ivan Pavlov

3.. A child's learned fear at the sight of a hypodermic needle is a(an)

- a. conditioned response.
- b. unconditioned stimulus.
- c. conditioned stimulus.
- d. unconditioned response.
- e. nonconditioned response.

4. Long after being bitten by a dog, Alphonso found that his fear of dogs seemed to have disappeared. To his surprise, however, when he was recently confronted by a stray dog, he experienced a sudden twinge of anxiety. This sudden anxiety best illustrates

- a. delayed reinforcement.
- b. latent learning.
- c. spontaneous recovery.
- d. shaping.
- e. Extinction.

Cognitive Processes

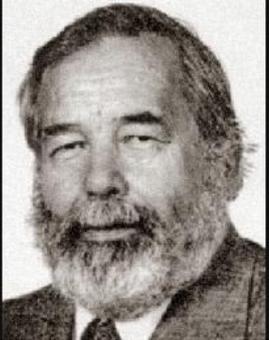
- Rescorla & Wagner :
- refined Pavlov's principles that classical conditioning occurs simply because two stimuli are closely associated in time
- An animal can learn PREDICTABILITY of an event.
 - They showed that CC is not a mindless process, cognitive process was involved in order to make CC successful.

Biopreparedness

- We are more likely to become conditioned to a thing that makes biological sense.



John Garcia and Taste Aversion



- **conducted pioneering research on taste aversion**
- **experiment: gave rats flavored water before a drug that produced gastrointestinal distress**
 - ▣ **rats acquired a conditioned taste aversion for the flavored water**
 - ▣ **he tried higher-order conditioning, but it didn't work**

John Garcia and Taste Aversion

- **results: being biologically prepared to quickly associate nausea with food or drink is adaptive**
- **taste aversion is a survival mechanism**
- **conditioned taste aversion is called the “Garcia Effect”**

One-Trial Learning & Taste Aversion

- **A taste aversion is a conditioned response that results from a person or animal establishing an association between a particular food and being or feeling ill after consuming it.**
- **Usually one experience will produce avoidance of the food in the future.**



One-Trial Learning vs. Classical Conditioning

- Generalization is rare in one-trial learning, and it is more resistant to extinction.
- Key: In classical conditioning, the CS and the UCS are closely paired whereas in one-trial learning the CR (feeling ill) which becomes associated with the food could occur as much as a day or so after the food (CS) was consumed.

Biological Predispositions

- Early behaviorists such as Pavlov & Watson believed that the laws of learning were similar for all animals.
- However, behaviorists later suggested that learning is constrained by an animal's biology.

