

Behaviorism Learning Theory

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What is Learning?

Learning is the process by which individuals acquire new knowledge, skills, behaviors, or attitudes through experience, practice, study, or instruction. It results in relatively permanent changes in behavior or understanding, often evidenced by the ability to perform new tasks or demonstrate new ways of thinking.

Classical Conditioning

Strengthening of relationship between a neutral and unconditioned stimulus to produce the same response – conditioned stimulus presented to elicit a behavior

Operant Conditioning

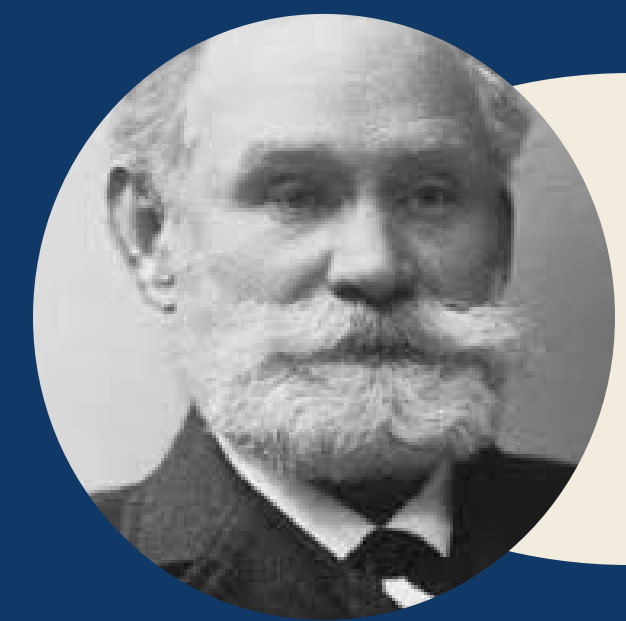
The strengthening of a response by a reinforcing stimulus. Response (behavior) is reinforced after it is elicited

Key Assumptions

- The mechanisms of learning include stimulus, response, and reinforcement
- Reinforcements can be provided in different ways to support learning
- Humans and animals learn in the same way
- Shaping and chaining activities are key to learning
- The mechanisms of learning include stimulus, response, and reinforcement

Key Theorists

Classical Conditioning Theorists



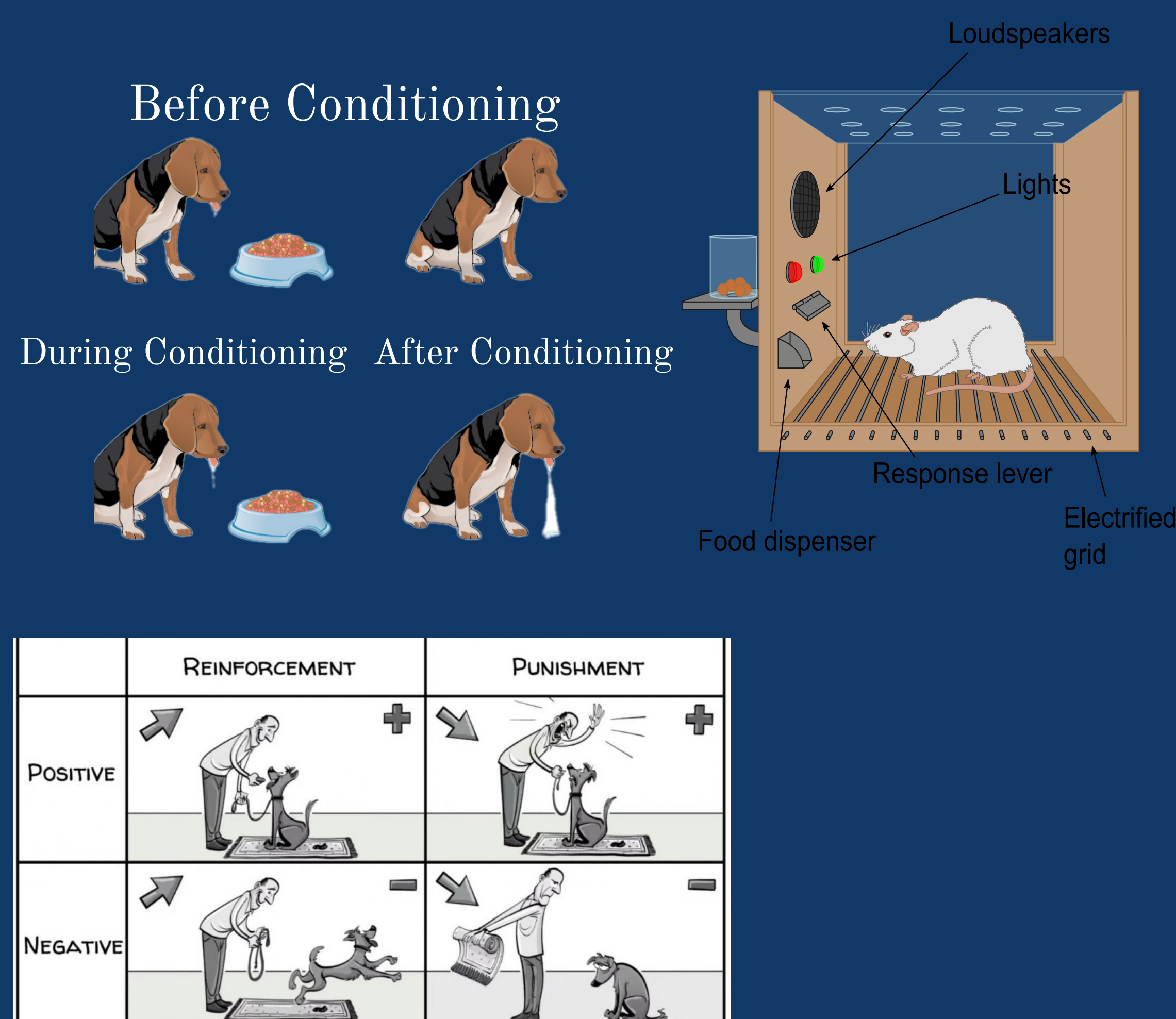
Ivan Pavlov

A neutral stimulus becomes associated with a meaningful stimulus, eliciting a conditioned response
Experiment: Pavlov's dogs



John Watson

The response that has most recently occurred after a particular stimulus is the response most likely associated with that stimulus
Experiment: Little Albert and the Rat



	REINFORCEMENT	PUNISHMENT
POSITIVE		
NEGATIVE		

Operant Conditioning Theorists



B.F. Skinner

Behavior is shaped by consequences, including reinforcement and punishment
Experiment: Skinner's Box



Edward Thorndike

"Law of Effect" Responses to a situation that are followed by satisfaction are strengthened; responses that are followed by discomfort are weakened.
Experiment: Cat in a box

Key Terms

- **Stimulus Generalization:** Response to another stimulus in the same manner they respond to conditioned stimuli
- **Superstitious Behavior:** Reinforcement is randomly administered
- **Stimulus:** An event in the environment used to prompt behavior
- **Response/Behavior:** An observable reaction that an organism makes to a stimulus
- **Stimulus Discrimination:** Occurs when one stimulus is presented in conjunction with an UCS and another stimulus is presented in the absence of the UCS
- **Free Operant:** Behavior or response that occurs freely and spontaneously
- **Spontaneous Recovery:** The reappearance of the salivation response after it had previously been extinguished
- **Terminal Behavior:** A form and frequency of a desired response at the end of a planned reinforcement program, described in concrete and observable terms

- **Fixed Ratio:** Presented after a certain constant number of responses
- **Variable Ratio:** Presented after a particular yet changing number of responses
- **Fixed Interval:** Presented after a particular yet changing number of responses
- **Variable Interval:** Contingent on the first response emitted after a certain time interval has elapsed, but the length of that interval keeps changing from one occasion to the next
- **Extinction:** If a learned behavior is not reinforced, it may eventually disappear
- **Shaping:** Gradually guiding behavior toward a desired outcome by reinforcing successive approximations of the target behavior
- **Chaining:** Series of behavior are linked together to form a complex sequence of actions
- **Terminal Behavior:** A form and frequency of a desired response at the end of a planned reinforcement program, described in concrete and observable terms

References

Ormrod, J.E. (2012) Human Learning (8th edition). Upper Saddle River, NJ: Pearson Education

IDE 621 Syracuse University Handout

Lumen Learning: Classical Conditioning | Introduction to Psychology – Brown-Weinstock (lumenlearning.com)

Graphics from: Wikipedia, Skinner's Operant Conditioning: Rewards & Punishments - Sprouts - Learning Videos - Social Sciences (sproutsschools.com), The Little Albert Experiment – Find A Therapist