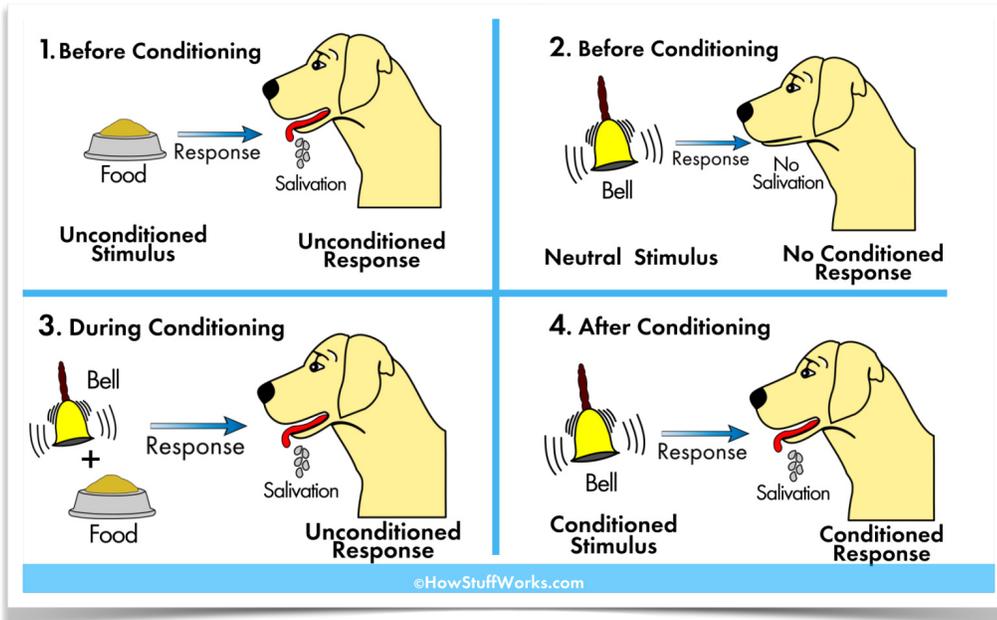


4.1 - Classical Conditioning

A Learned Association Between Two Independent Stimuli



What is associative learning?

A connection is made between two stimuli. Classical and operant conditioning are associative learning.

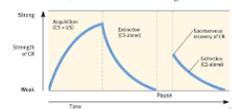


Acquisition...

Is the initial stage of learning, where the neutral and conditioned stimuli become linked.

Spontaneous Recovery

After a rest period, an extinguished CR (salivation) spontaneously recovers, but if the CS (tone) persists alone, the CR becomes extinct again.



These behaviors can go extinct

Over periods of time. A sudden recurrence of the association after extinction is known as spontaneous recovery.

Pavlov's Dogs

Ivan Pavlov (1849-1936), a famous early behaviorist, classically conditioned dogs to salivate at the sound of a bell. How?

In 1897, Pavlov conducted an experiment in which he offered dogs food and recorded their salivation levels (unconditioned stimulus/response). After noting that dogs didn't normally respond to the ring of a bell (neutral stimulus), he then began to ring a bell a short while before the dogs actually received the food. Soon, the dogs began to associate the ringing of the bell with the coming of food (conditioned stimulus) and would salivate at the bell's sound (conditioned response) even if no food was present.

1

GENERALIZATION

The tendency to respond the same way to two similar stimuli.

2

DISCRIMINATION

A learned ability to distinguish between a conditioned stimulus and other irrelevant stimuli.

3

HABITUATION

A diminishing withdrawal response after repeated exposure.

4.2 - Operant Conditioning

An Association Between a Behavior And Its Consequences

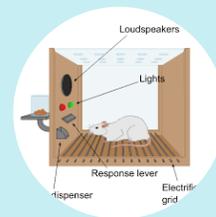
What's the difference between operant and classical conditioning?

The consequences of a behavior can be reinforcement or punishment. Reinforcements encourage and increase behaviors, while punishments discourage and decrease them. Here are four types of operant conditioning...

<p>POSITIVE REINFORCEMENT</p> <p>Increases good behavior by presenting a positive stimulus as a reward</p> <p>ex. Stickers, verbal praise</p>	<p>NEGATIVE REINFORCEMENT</p> <p>Increases good behavior by removing a displeasing, negative stimulus</p> <p>ex. Finishing work so you can leave class early</p>	<p>POSITIVE PUNISHMENT</p> <p>Decreases bad behavior by presenting a negative stimulus</p> <p>ex. A traffic ticket for speeding, given chores as a punishment</p>	<p>NEGATIVE PUNISHMENT</p> <p>Decreases bad behavior by removing a positive stimulus</p> <p>ex. Having your phone taken away</p>
--	---	--	---

Reinforcement can be continuous (occur every time) or be partial (intermittent) and run on a reinforcement schedule. Reinforcement schedules are exactly what they sound like: schedules that determine how often a behavior is reinforced. Schedules can be...

<p>FIXED RATIO</p> <p>Reinforced every so many times</p> <p>ex. Getting a prize for every 5 "good behavior" stamps</p>	<p>FIXED INTERVAL</p> <p>Reinforced every so often</p> <p>ex. Free ice cream at a specific place every Thursday</p>	<p>VARIABLE RATIO</p> <p>Reinforced after an unspecified, variable number of times</p> <p>ex. Pressing an elevator button over and over</p>	<p>VARIABLE INTERVAL</p> <p>Reinforced after an unspecified, variable amount of time</p> <p>ex. Running into someone at a specific place</p>
---	--	--	---



What is Skinner's Box?

John Skinner, another behaviorist, conducted an experiment in which rats in chambers ("Skinner's Boxes") had the behavior of pressing a lever at a certain time reinforced. When the rat's behavior was reinforced, it became more frequent.

[More information on Skinner's Box](#)

Shaping

Is an operant conditioning procedure in which reinforcers guide behavior toward closer and closer approximations of the desired behavior. ex. Teaching small children a dance

Discriminative Stimulus

This is a stimulus that is used consistently to gain a specific response.

4.3-4.4 - Observational Learning and Factors in Learning

Biological factors in learning include...

PREPAREDNESS

A biological predisposition to learn associations (ex. Between seeing a predator and being attacked) that have survival value.

John Garcia's rat experiment is a great example.

PREDISPOSITIONS

Make it easy to learn and retain certain behaviors. Also influenced by instinctive drift - the tendency of learned behavior to gradually revert to biologically predisposed patterns.



Observational learning happens through modeling, which is the process of observing and imitating a specific behavior. (Ex. A child playing restaurant, house, or any other role-playing game based off something they have seen.)

Albert Bandura's "Bobo Doll" Modeling Experiment demonstrated the effect of violent examples on children's pliable minds.

Cognitive factors in learning include...

THE CONTINGENCY MODEL

This model suggests that the presence of one event must reliably predict the presence of the other, and that this presupposition determines whether or not we learn.

INTRINSIC/EXTRINSIC MOTIVATION

Intrinsic motivation is motivation to perform a task well for its own sake, while extrinsic motivation causes someone to perform the task just for its rewards.

ex. Creating a work of art for its own sake rather than to make money off of selling it.

Strong E.Q. and positive, caring relationships build emotional capability for learning. When it comes to performing tasks, the perceived amount of control has a HUGE effect on performance.

What are mirror neurons?

Some scientists believe that some frontal lobe neurons ("mirror neurons") fire when we observe another person performing certain tasks as if we are performing those very tasks.

Applications

Violence on TV and in other media can have harmful effects due to the influence of observational learning on children's pliable minds.

EMOTION-FOCUSED COPING

Attempting to alleviate stress by avoiding/ignoring the stressor and attending to emotional needs related to the stress reaction.



INTERNAL LOCUS OF CONTROL

The perception that we control our own fates

PROBLEM-FOCUSED COPING

Attempting to alleviate stress directly by changing the stressor or the way we interact with that stressor.



EXTERNAL LOCUS OF CONTROL

The perception that chance or outside forces beyond our control control our fate