
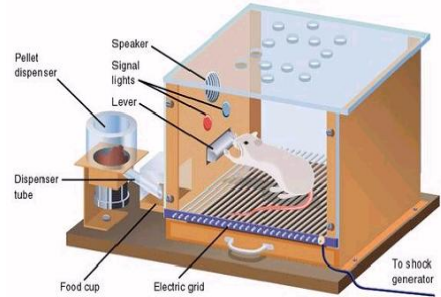


UNIT 6 — LEARNING

Vocabulary Term	Definition of Term	Example
Learning	A relatively permanent behavior change due to one's experiences.	Suppose that a person sees and smells freshly baked cookies, they eat some, and find them to be delicious. When they next see and smell freshly baked cookies, their experience will lead them to that eating them will once again be delicious.
Associative learning	Learning that two events happen simultaneously. The events could be stimuli or a response and its consequence. Behaviors we repeat in a certain context we start to associate with that context.	Seals in an aquarium will repeat behaviors, such as slapping and barking, that prompt people to toss them a herring.
Classical Conditioning	One learns to link two or more stimuli and expect and prepare for events in this type of learning.	Ivan Pavlov's salivation experiment. Pavlov presented a neutral stimulus (a tone) just before an unconditioned stimulus (food in mouth). The neutral stimulus then became a conditioned stimulus, producing a conditioned response.
Behaviorism	The idea that psychology should be an objective science based on observable behavior.	Behavior should be studied without reference to mental processes.
Unconditioned Response	The naturally occurring response to the unconditioned stimulus in classical conditioning.	In Pavlov's experiment, the salivation when the food is in the mouth.
Unconditioned Stimulus	A stimulus that unconditionally-naturally and automatically-triggers a response in classical conditioning.	In Pavlov's experiment, the food in the mouth is the unconditioned stimulus.
Conditioned Response	In classical conditioning, the learned response to a previously neutral (now conditioned) stimulus (CS).	In Pavlov's experiment, salivation at the sound of the tone (CS) alone.
Conditioned Stimulus	An originally irrelevant stimulus that, after association with an unconditioned stimulus, begins to trigger a conditioned response.	The conditioned stimulus in Pavlov's experiment is the tone.
Acquisition	In classical conditioning, the initial stage, when one links a neutral stimulus and an unconditioned stimulus so that the neutral stimulus begins triggering the conditioned response. In operant conditioning, the strengthening of a reinforced response.	In Pavlov's experiment this is when the dog links the tone to the food.
Higher-Order Conditioning (also called second-order conditioning)	A procedure in which a new neutral stimulus becomes a new conditioned stimulus (often weaker). All that is required for this to happen is for it to become associated with a previously conditioned stimulus.	An animal that has learned that a tone predicts food might then learn that a light predicts the tone and begin responding to the light alone.
Extinction	In classical conditioning the diminished responding that occurs when the CS no longer signals an impending US. In operant conditioning when a response is no longer reinforced.	Pavlov discovered that when he sounded the tone again and again without presenting food, the dogs salivated less and less.

Spontaneous Recovery	The reappearance of a (weakened) CR after a pause.	Pavlov found, however, that if he allowed several hours to elapse before sounding the tone again, the salivation to the tone would reappear spontaneously.
Generalization	The tendency to respond to stimuli similar to the CS.	When toddlers who are taught to fear moving cars also become afraid of moving trucks and motorcycles.
Discrimination	The learned ability to distinguish between a conditioned stimulus (which predicts the US) and other irrelevant stimuli.	Confronted by a pit bull, your heart may race; confronted by a golden retriever, it probably will not.
Respondent Behavior	Actions that are automatic responses to stimuli.	Salivating in response to meat powder and later in response to a tone.
Operant Conditioning	Learning in which actions followed by reinforcers increase; those followed by punishers decrease.	In the skinner box rats push the lever because of the reinforcement of food.
Operant Behavior	Behavior that operates on the environment to produce rewarding or punishing stimuli.	
Law of Effect	Edward L. Thorndike's idea that rewarded behavior is likely to recur.	In Thorndike's experiment he put cats in a puzzle box and timed them to see how long it took them to get out with a fish being the reward. The time went down after successive trials.
Operant chamber	A box designed by B. F. Skinner that has a bar or key than an animal presses or pecks to release a reward of food or water, and a device which records these responses.	
Shaping	A procedure in which reinforcers gradually guide an animal's actions toward a desired behavior.	If you were training a hungry rat to press a bar you would give it food every time it approaches the bar, once the rat does this regularly you would require it to move closer before rewarding it, then closer still, and finally, you would require it to touch the bar before you gave it the food.
Reinforcer	Any event that strengthens (increases the frequency of) a preceding response.	Reinforcers can be anything from tangible rewards such as food or money, or things like praise or attention. Also, it could be being yelled at if a child is seeking attention or even an activity like taking a break after an hour of studying.
Positive Reinforcement	Strengthening of a response by presenting a typically pleasurable stimulus after a response.	Getting a hug, receiving a paycheck.
Negative Reinforcement	Strengthens a response by reducing or	Taking aspirin may relieve your

	removing something undesirable or unpleasant.	headache or pushing the snooze button shuts off your alarm are both examples of negative reinforcement and increase the odds that you will repeat these behaviors.
Primary Reinforcer	Primary reinforcers are unlearned	Getting food when hungry or having a painful headache go away.
Conditioned Reinforcer (Secondary reinforcers)	Get their power through learned association with primary reinforcers.	Money, good grades, and a pleasant tone of voice.
Continuous Reinforcement	Reinforcing the desired response every time it occurs.	Giving the rat food every time it presses the lever.
Partial (intermittent) Reinforcement	When responses are sometimes reinforced, sometimes not.	A salesman making a sale sometimes, but not always.
Fixed-Ratio Schedule	When one is reinforced after a set number of responses.	Getting a free drink at a coffee store after purchasing 10.
Variable-Ratio Schedule	A schedule that provides reinforcers after an unpredictable number of responses.	Slot-machines.
Fixed-Interval Schedule	Reinforcing the first response after a fixed time period	Checking more frequently for the mail as the delivery time approaches
Variable-Interval Schedule	Schedules that reinforce the first response after varying time intervals. Variable-interval schedules tend to produce slow, steady responding.	Like getting the "You've got a new text message" that finally reward persistence in rechecking your inbox.
Punishment	Any consequence that decreases the frequency of a preceding behavior.	The rat that is shocked after touching a forbidden object and the child who loses a treat after running into the street will learn not to repeat the behavior.
Cognitive Map	A mental representation of a place.	A person in a new place could make a cognitive map of the city.
Latent Learning	Learning that becomes apparent only when there is some incentive to demonstrate it.	If you are driven to school every day by your friend, you may learn the way to school, but have no need to demonstrate your knowledge. However, if your friend is sick one day, so you are forced to drive, if you got to school using the same route your friend drives you have demonstrated latent learning.
Intrinsic Motivation	The desire to perform a behavior effectively for its own sake.	Doing this assignment in order to better prepare myself for my test and because I find the material interesting and worth pursuing would be an example of intrinsic motivation.
Extrinsic Motivation	The desire to behave in certain ways to receive external rewards or avoid threatened punishment.	Feeling pressured to finish this assignment before a deadline, being worried about one's grade, or being eager for reward that depend on one doing well are all examples of extrinsic motivation.
Observational Learning	Learning by observing and imitating others.	A child who sees her brother burn his fingers on a hot stove learns not to touch the hot stove.
Modeling	A process by which we observe and imitate specific behaviors.	Catch-phrases, hem lengths, ceremonies, foods, traditions, vices, and fads are all examples
Mirror Neurons	The neurons activity provides a neural basis for imitation and observational learning.	When a monkey grasps, holds, or tears something, these neurons fire. And they likewise fire when the monkey observes another doing so.
Prosocial Behavior	Behavior that is positive, constructive	Encouraging children to read, reading

	and helpful.	to them, and surrounding them with books and people who read would be prosocial behavior.
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Authors of Important Study	Basic of What Was Done	Lesson(s) learned from the study
Ivan Pavlov	He paired neutral events – stuff the dog did not associate with food but he could hear – with food in the dog’s mouth. Pavlov presented a neutral stimulus (a tone) just before an unconditioned stimulus (food in mouth). The neutral stimulus then became a conditioned stimulus, producing a conditioned response.	Classical conditioning is a basic form of leaning. We also learned that many other responses to many other stimuli can be classically conditioned in many other organisms. Which means classical conditioning is one way that virtually all organisms learn to adapt to their environment. Finally, Pavlov showed us how a process such as learning can be studied objectively.
B.F. Skinner	Skinner designed an operant chamber in his experiments. Skinner used shaping to gradually guide an animal’s actions toward a desired behavior. He would have a rat press down on a lever to gain a reinforcer (food).	Skinner developed a behavioral technology that revealed principles of behavior control. He helped us to discover operant conditioning. Also, he elaborated on the law of effect.
Albert Bandura	After watching an adult pound, kick, and throw around a Bobo doll a child is much more likely to do the same when frustrated then children who did not watch an adult do this.	Apparently, observing the aggressive outburst lowered their inhibitions. This idea introduced us to observational learning. Observational learning can have both prosocial and antisocial effects on those observing them.

Name of Important Person	What this person is known for	Impact on Psychology
Ivan Pavlov	Pavlov is most famously known for his work in classical conditioning. The experiment involved a dog, a tone, and food.	Pavlov is known for developing the idea of classical conditioning. He helped us to understand a basic form of learning. Also, he taught us how to study things objectively.
John Garcia	Garcia is known for experimenting whether associations can be learned equally well. He did this by giving rats a certain tasting water that would later make them nauseous. The rats then tended to avoid that taste.	This lead to the finding that some associations, we are biologically prepared for, where as others need to be learned over time. Organisms are predisposed to learn associations that help them adapt.
John B. Watson	Watson is most famous for his Little Albert experiment, in which he trained an infant to fear rabbits by using a loud noise when the child was exposed to the rabbit.	His experiment was based off the idea that human emotions and behaviors, though biologically influenced, are mainly a bundle of conditioned responses. This also helped to prove the ideas of generalization and discrimination.
B.F. Skinner	Skinner is well known for creating the Skinner box which helped him in his operant conditioning experiments. These experiments involved teaching rats to repeat behaviors by giving them positive or negative reinforcers. Skinner strongly believed that external influences shape behavior.	Skinner’s experiments made clear the idea of operant conditioning and elaborated on the law of effect.
Albert Bandura	The observational learning experiment involving Bobo the inflatable doll is	His experiment led us to understand the concept of observational learning.

	what Albert Bandura is most known for.	This further led to the ideas of prosocial and antisocial effects of observational learning.
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