CLASSICAL CONDITIONING

- **learning:** relatively permanent change in behavior due to experience
- **classical conditioning:** (learning by association) where a stimulus gains the power to cause a response because it predicts another stimulus that already produces the response [flush! hot water! jump!]
- **response:** any behavior or action
- **behaviorism** [Watson]: psychology should only study observable behaviors, not mental processes
- **cognition:** mental processes [thinking, knowing, remembering]

COMPONENTS OF CLASSICAL CONDITIONING

- **unconditioned stimulus (UCS**): stimulus that triggers an automatic or reflexive response
- **unconditioned response (UCR):** response to the UCS--reflexive, NOT learned
- **conditioned stimulus (CS):** previously neural stimulus that's gained the power to cause a conditioned response
- **conditioned response (CR):** response to the conditioned stimulus--NOT reflexive: learned

PROCESSES OF CLASSICAL CONDITIONING

- **acquisition:** process of developing a learned response
- **extinction:** diminishing of a learned response (unconditioned stimulus doesn't follow a conditioned stimulus) [boy who cried "wolf"]
- **spontaneous recovery:** return of an extinguished response after a rest period

EXAMPLES

PAVLOV: was studying effect of salivation on digestion. Dogs began to drool before the stimulus. Collected saliva & experimented:

- UCS: meat powder
- UCR: salivation (reflex)
- neutral stimulus: sound of tuning fork before conditioning
- CS: sound of tuning fork after conditioning
- CR: salivation (response to tuning fork
- acquisition: sounding tuning fork before giving meat powder
- extinction: sounded tuning fork without the meat powder
- spontaneous recovery: next day, tuning fork produced salivation

- **generalization:** process when an organism produces the same response to two similar stimuli [the closer a different sound was to the sound Pavlov used, the more the dogs responded]
- **discrimination:** process when an organism produces different responses to similar stimuli [Pavlov's dogs would not have responded to a different sound, even though it was a sound; or discriminating between a bee's buzz & a mosquito's buzz]

LITTLE ALBERT: Watson established fear of rats in an 11-year old boy (led to ethical standards!)

- UCS: loud noise--> UCR: fear
- neutral stimulus: rat + UCS (loud noise) -->UCR (fear)
- CS (rat)--> CR (fear)
- stimulus similar to rat (rabbit)--> conditioned fear (generalization)

ARE *YOU* CONDITIONED? Oh yeah!

- Advertisers use association (cool water with soft drinks, tea), Marlboro (rugged, handsome, manly), Mountain Dew (young, wild), Victoria's Secret (sexy)
- Negative associations: place where you were hurt or sad, got sick, etc.

TASTE AVERSION: foods that you get sick from make you no longer want them--biological?? Common fears (heights, snakes) are less likely--why phobic? Evolutionary safety net?