

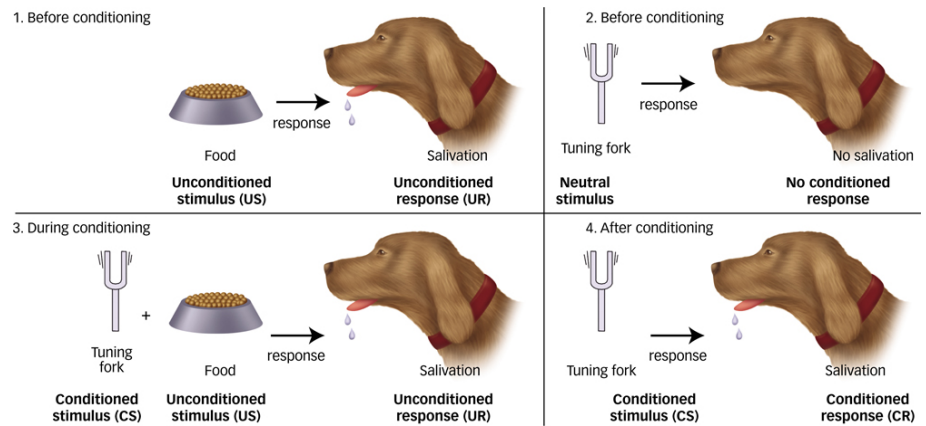
Learning: Some experience that result in a relatively permanent change in the state of the learner.

Classical Conditioning: When a neutral stimulus evokes a response after being paired with a stimulus that naturally evokes a response.

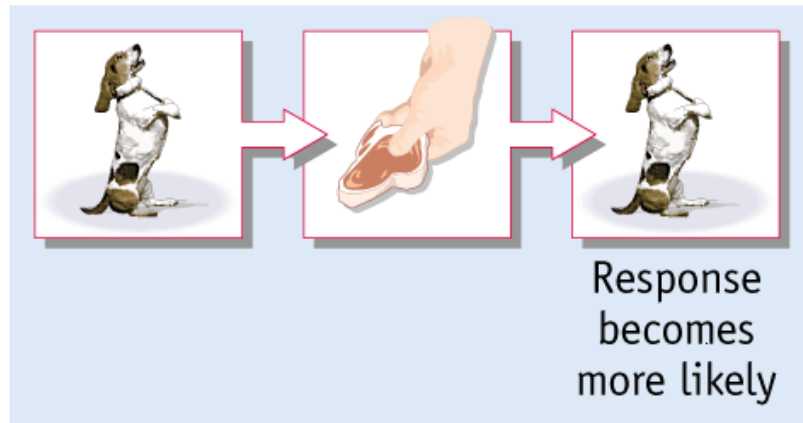
Learning

Most general psychology textbooks describe three types of learning.

Classical Conditioning



Operant Conditioning



Observational Learning



Conditioning

Conditioning (learning) is the process of learning associations between environmental events and behavioral responses.

- Classical conditioning (usually involves involuntary responses)
 - Operant conditioning (usually involves voluntary responses)
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Classical Conditioning

Classical Conditioning: When a neutral stimulus evokes a response after being paired with a stimulus that naturally evokes a response.

Examples from your text:

- Nathalie, a former cigarette smoker always feels the urge to light up a cigarette after sex
- Garfield, who got the flue after his first taste of oysters and hasn't been able to stand them since
- Mimi, who worked in the World Trade Center on 9/11/2001 and feels her heart racing with anxiety every time she returns to lower Manhattan
- Sharon, who broke up with her ex-boyfriend years ago but still finds the sound of his voice arousing
- Pavlov's dogs

Other Examples

- Little Albert

Elements of Classical Conditioning

Classical Conditioning: When a neutral stimulus evokes a response after being paired with a stimulus that naturally evokes a response.

Identify the US, UR, neutral stimulus, CS and CR

- (1) Before each of his chemotherapy sessions, Allen, a young cancer patient, is given a bowl of ice cream. The chemotherapy makes Allen nauseated. Now just seeing the bowl of ice cream makes him feel queasy.

- (2) Frank loved to swim in the lake near his house. After swimming in the lake one afternoon, he discovered two big slimy, bloodsucking leeches firmly attached to his leg. He was revolted as he pulled the slimy leeches off his leg. Now every time he passes the lake, he shudders in disgust.

- (3) Every time two-year-old Jodie heard the doorbell ring she raced to open the front door. On Halloween night, Jodie answered the doorbell and encountered a scary monster with nine flashing eyes. Jodie screamed in fear and ran away. Now Jodie screams and hides whenever the doorbell rings.

Classical Conditioning



Classical conditioning in action. Have you every wondered why politicians kiss babies? Or why beautiful women are so often used to promote products?

Using the process of classical conditioning, explain why politicians kiss babies or why beautiful women are often used to promote products.

What is the

- US
- UR
- Neutral stimulus
- CS
- CR

Classical Conditioning: One Trial Learning & Taste aversions



Lithium and coyotes

Identify the

1. unconditioned stimulus (UCS),
2. unconditioned response (UCR),
3. neutral stimulus,
4. conditioned stimulus (CS),
5. conditioned response (CR).

How does the research on taste aversions violate two basic principles of classical conditioning?

- Learning of an association does not require repeated pairings of the stimulus and response.
- The time delay is in hours and not seconds.

Classical Conditioning

	US	UR	NS	CS	CR
Nathalie, a former cigarette smoker always feels the urge to light up a cigarette after sex					
Garfield, who got the flu after his first taste of oysters and hasn't been able to stand them since					
Mimi, who worked in the World Trade Center on 9/11/2001 and feels her heart racing with anxiety every time she returns to lower Manhattan					
Sharon, who broke up with her ex-boyfriend years ago but still finds the sound of his voice arousing					

Classical Conditioning

A wide range of bodily and psychological response can be classically conditioned, including

- Acquisition of fear and anxiety
- Reduction of fear, anxiety and phobias
- Sexual attraction
- Positive attitudes toward...
- Negative attitudes toward...
- Drug effects
- Compensatory responses

Quite often we are unaware of the processes that led to these classically conditioned responses.