



How do we Learn?

Module 18:
Basic Learning
Concepts and Classical
Conditioning



Class Objectives:

- ☞ What is learning?
- ☞ What is Classical Conditioning?

What is Learning?



☞ Learning anything new involves change. Psychologists agree that most behaviors are learned.

☞ _____

- The process by which we acquire new knowledge

How do you know
you've learned
something?



THINK

Many principles of
learning are based on the
idea of conditioning...



THINK

Conditioning



Conditioning ()
refers to a procedure where associations and
responses to stimuli are learned.

- Conditioning is just another word for _____



In the process of conditioning there is always a _____



☞ A stimulus is an event that has an _____

- (CAUSE)

☞ A response is _____

- (EFFECT)



For every stimulus there is a response



☞ Stimulus
(Cause)



Response
(Effect)



We are all conditioned in some way



☞ Conditioned behaviors appear so automatically that they _____

- Conditioned behaviors are similar to reflexes because they _____

How are you conditioned?



Classical Conditioning



Classical conditioning is one of the simplest forms of learning.

- Ivan Pavlov

Pavlov's research was simple- to teach a dog to salivate in



Conditioning is synonymous with learning



Pavlov called a stimulus that elicits a response without



Bell = food (CS)
What kind of response will we get?

• _____

• Bell _____

Did you get it?
Test your understanding
about conditioning!

Identify the UCS, UCR, CS and CR for each of the following examples.

Identify the UCS, UCR, CS,
and CR

ca Alexander is four years old. One night his parents decided to light a fire in the family room fireplace. A burning ember jumped out of the fireplace and landed on Alexander's leg, creating a nasty burn. He cried because the burn hurt. A week later, when Alexander's parents started to light another fire in the fireplace, Alexander began to cry.

- UCS -

- UCR -

- CS -

- CR -

Identify the UCS, UCR, CS, and CR



CS Bianca's mom followed the same routine before serving dinner - she would put ice in the glasses and then call "come and get it, dinner's ready." Immediately upon hearing those words, Bianca would quickly run down the stairs. After a while, Bianca would come running down the stairs when she heard the ice hitting the glasses.

- UCS -
- UCR -
- CS -
- CR -

Identify the UCS, UCR, CS, and CR



CS Marco is driving to work during a heavy snowstorm when the brake lights on the car ahead of him come on. He hits his breaks but is unable to avoid hitting the car. He is badly shaken up in the accident. The next time he is driving in the snow he notices that he tenses up every time he sees brake lights come one ahead of him.

- UCS
- UCR
- CS
- CR

What do you think would happen if Pavlov rang the bell each day, but never followed it with food?



The dog would learn to



This gradually reduces the probability that the conditioned response will occur

How would you Help Emily?



OR



Spontaneous Recovery



OR

- Requires no additional pairings , just the passage of time.

Back to Emily



☞ Six months later, while walking through the cologne department at Macy's, Emily smells Polo cologne and immediately thinks of James...

- this is _____



Humans experience conditioned emotional responses, which explains many complex behaviors



Likes, dislikes, prejudices and fears

Human Conditioning

(Baby Albert experiments)



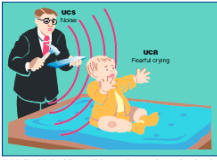
☞ Watson and Rayner (1920) conditioned an 11-month-old infant.

☞ Through the process of Classical Conditioning Baby Albert was conditioned to fear...a lot.

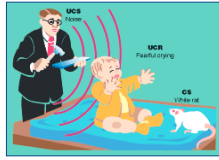
- This experiment is now considered unethical



► **Classical Conditioning and Little Albert**



Initially, Little Albert did not show a fear of animals, but he did exhibit fear if a loud noise was made behind his back (a hammer striking a steel bar).



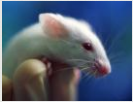
Then the researchers presented a white rat (CS) and made the loud noise (UCS).



After five presentations of the CS and UCS, Albert developed a phobia of rats—he began whimpering and withdrawing (the conditioned emotional response) and trying to avoid the rat. After two more presentations of CS and UCS, he immediately began crying on seeing the rat. "He ... fell over on his left side, raised himself ... and began to crawl away so rapidly that he was caught with difficulty before reaching the edge of the table" (Watson and Reynor, 1920, p. 5).

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Baby Albert- Conditioned FEAR



☞ Baby Albert was initially conditioned to fear white rats, but the fears were expanded to include:

- Rabbits, dogs, fire, monkeys, Santa clause masks, white hair, men with beards, cotton balls, fur

More Classical Conditioning



☞ _____ occurs when the conditioned response transfers or "spreads" to a new stimuli.

- Example- fear of blood spreads to other red items

☞ In *stimulus discrimination*, an _____

- Example-Different bell tones (Pavlov)

The Garcia Effect



☞ The Garcia effect is an example of classical conditioning in everyday life.

- John Garcia (Garcia & Koelling, 1971) gave animals specific foods or drinks. _____

☞ Many people who have experienced food poisoning can relate to this stimulus discrimination!

What's Next?



☞ Can we learn any other way?

- Operant conditioning and Social Learning
