

# **Classical Conditioning**

Classical conditioning is a learning that results from the pairing of a neutral stimulus and an unconditional stimulus. It takes advantage of the fact that certain behaviors are reflexive, and occur as specific responses to a stimuli in the environment. An example of this is Pavlov's study on the salivation reflex in dogs. Through manipulation of an unconditioned stimulus and its unconditioned response, he was able to pair a neutral stimulus to create a conditioned stimulus. This led to creating a conditioned response, where the ringing of only a bell led to a salivation reflex.



### **UCS (UnConditioned Stimulus)**

### Dog Food without Conditioning

An unconditioned stimulus (UCS) is a stimulus in the environment that automatically elicits a response, leading to an unconditioned response. An example of an unconditioned stimulus is dog food.

#### **UCR (UnConditioned Response)**

### Dog Drooling without Conditioning

An unconditioned response (UCR) is an automatic response to an unconditioned stimulus. An example of this, from Pavlov's experiment, is a dog drooling as a response to being presented dog food.

### **NS (Neutral Stimulus)**

# **Neutral Bell Ringing**

A neutral stimulus is a third element introduced to a classical conditioning environment. This is classified as an environmental event that does not automatically elicit a conditioned response. In Pavlov's experiment, the neutral stimulus was the bell.

### **CS (Conditioned Stimulus)**

## Conditioned Dog Food and Bell Ringing

A conditioned stimulus is described as a neutral stimulus that has been repeatedly paired with the unconditioned stimulus and now elicits the response. In the case of Pavlov's experiment, the conditioned stimulus is the bell, which the dog now associates with food.

## **CR (Conditioned Response)**

# Bell Ringing causing Dog to Drool

A conditioned response is the response which occurs when presented a conditioned stimulus. For example, in Pavlov's experiment, the dog's salivation to the sound of the bell is not an automatic or unconditioned response, but rather a learned response, called the conditioned response.