

Associative Learning

by Sophia Tutorial



WHAT'S COVERED

This tutorial will cover the concept of learning and how it relates to conditioning. Our discussion breaks down as follows:

- 1. Learning
- 2. Associative Learning and Conditioning

1. Learning

Learning in a psychological sense is an internal, as well as external, process that results in a change in a person's behavior. There are two aspects of learning under psychology. The first is cognitive learning, which comprises the internal mental processes that result in understanding and the construction of knowledge.

EXAMPLE Cognitive learning is what we normally think of as learning in relation to things like school, which involves compiling a variety of ideas and knowledge to build a greater understanding of the world.



TERM TO KNOW

Learning

An internal and external process that results in changes in a person's behavior

2. Associative Learning and Conditioning

In a more basic sense, though, learning is also the connection of external stimuli--things in the environment--to the responses of the individual to those things. In other words, when we see something, we do something, which is called **associative learning**. Underlying associative learning is the theory of behaviorism, which explains how this works.

Now, associative learning starts with the idea that some responses are not learned, such as reflexes. Reflexes are involuntary automatic reactions to stimuli around an individual.

EXAMPLE For example, if you bump your knee, your leg moves--it's a reflex to the bumping of the knee.

Infants start off with only these reflexes within their body, reactions like sucking or grasping. They can essentially only respond to the environment in these ways, because they haven't learned anything yet.

Next, these infants begin to associate certain actions that they do with other responses from their environment. A **reinforcement** is anything that follows an action and makes it more likely to occur later on.

EXAMPLE For example, if a baby cries, then it receives a reinforcement of milk, which makes the baby more likely to cry when it wants milk in the future. The reinforcement--milk, in this case--causes an action-crying--to become more likely to occur.

These types of interactions with the outside world and the internal workings of a person start to build increasingly more complex networks of what are called antecedents and consequences. An **antecedent** is any kind of event that comes before a response or an action, otherwise known as a stimuli.

EXAMPLE For example, if you hear an explosion, or if you see a bear, or if you see your mother, even--all of these are antecedents.

There are also **consequences**, which are any events that come after a response or action. This includes reinforcements, those things that make it more or less likely for an action to occur.

EXAMPLE For example, if you get burned, or if you get to safety, or even if you get a bar of chocolatethese are all consequences, or events that result from an action.

Eventually, by building up all these ideas of antecedents, actions, and consequences, we start to develop a framework to explain all of human behavior, even complex actions. There are two specific realms in behavioralism and associative learning that explain human behavior, which are classical conditioning and operant conditioning. These will be covered in more detail in later lessons.



Associative Learning

Learning as a connection of external stimuli in the environment to responses by the individual

Reflex

Involuntary, automatic reaction to stimulus

Reinforcement

Anything that follows an action and makes it more likely it to occur again

Antecedents

Events that come before a response or action (like stimuli)

Consequences

Events that come after a response or action (like reinforcement)



SUMMARY

Today we discussed the concept of **learning** in a psychological sense, which refers to an internal and external process that results in changes in a person's behavior. There are two aspects of learning under psychology: cognitive learning and **associative learning**.

Cognitive learning comprises the internal mental processes that result in understanding and the construction of knowledge, such as the learning that occurs in school. Associative learning comprises learning as a connection of external stimuli in the environment to responses by an individual. Associative learning begins as reflexes, or automatic reactions to stimuli, then progresses to building a complex network of antecedents and consequences (such as reinforcements). Through this network, individuals start to develop a framework that explains all of human behavior, through the concepts of classical **conditioning** and operant conditioning.

Good luck!

Source: THIS WORK IS ADAPTED FROM SOPHIA AUTHOR ERICK TAGGART.



TERMS TO KNOW

Antecedents

Events that come before a response or action (like stimuli)

Associative Learning

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