

THE HABITUATION EFFECT, THE SENSITIZATION EFFECT, AND PETS

Repetitive presentation of stimulus triggers elicitation of decremental and incremental responses (Davis et al., 1982).

What is the Habituation Effect?

A progressive decrease in the vigor of an elicited response that may occur with repeated presentations of the eliciting stimulus. This effect is often temporary and disappears if the stimulus isn't presented (**spontaneous recovery**). Habituation requires that the stimulus be the same—stimulus specificity (Domjan, 2018).

What is the Sensitization Effect?

An increase in the vigor of **elicited behavior** that may result from repeated presentations of the eliciting stimulus or an intense unrelated event (Domjan, 2018). Unlike habituation, sensitization does not require the stimulus specificity (Domjan, 2018).

Elicited Behavior - A specific behavior or action pattern that occurs reliably upon presentation of a particular stimulus (its eliciting stimulus) (Domjan, 2018).

Spontaneous Recovery - Recovery of a response produced by a period of rest after habituation or extinction (Domjan, 2018).

Startle Response - A sudden jump or tensing of the muscles that may occur when an unexpected stimulus is presented (Domjan, 2018).

Short-term Habituation - A habituation effect that lasts a relatively short period of time, sometimes less than a minute (Domjan, 2018).

Long-term Habituation - A type of habituation that lasts a day or more and does show spontaneous recovery (Domjan, 2018).

Short-term Sensitization - A form of sensitization that lasts a relatively short period of time, sometimes less than a minute (Domjan, 2018).

Long-term Sensitization - A form of sensitization that is persistent and slow to decay (Domjan, 2018).

Scenario

Something triggers the fire alarm system of an apartment complex. In the apartment there is a pet. In response to this loud, unfamiliar sound (eliciting stimulus) the pet has startles and begins to make a distressing noise or runs to hides (elicited behavior). This alarm continues until the fire department arrives and turns it off. After this event, the pet becomes sensitive to the sound of alarms in nearby buildings as well.



If Habituation...

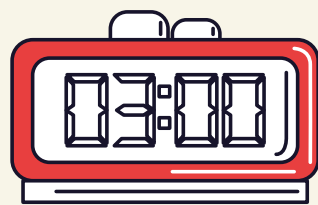
The pet may become habituated to the sound of the distant alarms, a relatively weak stimulus (Antzoulatos, 2008):

- progressive decrease of distressed sound or slowly come out of hiding (**startle response**) (Domjan, 2018).
 - If the alarm sounds again and they exhibit their startle response again, then only **short-term habituation** occurred (Domjan, 2018).
 - If there is no elicited response then they have achieved **long-term habituation** due to repeated, and similarly pattern stimulation usually over a longer period of time (Stopfer et al., 1996).

If Sensitization...

The pet may become sensitized to the sound of a fire alarm in their apartment, a strong stimulus (Antzoulatos, 2008):

- increase of the distressed sounds or they will stay in their hiding spot.
 - **Short-term sensitization** occurs if the pet's response decreases in the presence of the stimulus (Domjan, 2018).
 - **Long-term sensitization** is evident if the pet continues to elicit the distressed sound or hides (Domjan, 2018).
 - This can also be triggered by other loud noises such as a car horn, thunder, or even the sound of an alarm clock as the pet comes into contact with more unfamiliar sounds (Cevik, 2014)



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