

WHAT IS LEARNING

- To find general principles that are applicable to many different species and many different learning situations.
- "Learning is a change in behaviour due to experience"

CHANGE:

- Learning always involves some sort of change
- This can be an increase/decrease in the frequency, intensity, speed, duration or form of behaviour

Eg. Riding a bike= increase in our speed and time that we can stay on a bike

Quit Smoking= decrease in the number of cigarettes we have and time before the next one

The key issue in learning is whether a change in behaviour occurred, not how long it lasted.

While we assess learning by observing a change in behaviour, the behaviour is actually a measure of "performance" rather than a direct measure of "learning"

Week Two

Habituation

"Habituation is a decline in responding to repeated presentations of a stimulus."

The decrease in your startle response with the repeated presentation of a loud noise is an example of habituation. This is the simplest form of learned behaviour and it involves changes in responding to a single stimulus which is presented repeatedly.

Habituation is a ubiquitous form of learning in that it occurs in single cell protozoa, invertebrates, insects, mammals and in people.

Eric Kandel won the Nobel Prize for Medicine and Physiology for his work on the neural mechanisms of learning which he discovered through examining habituation in sea snails.

Dishabituation is the re-emergence of a habituated response due to the presentation of another external stimulus.

BABY VIDEO: HABITUATION SHOWS US THAT THIS BABY'S MEMORY IS ALREADY FUNCTIONING

Sensitisation

Sensitisation; is the increase in responding following repeated presentations of a stimulus.

Groves and Thompson's dual process theory (1970) was one of the first attempts to account for both habituation and sensitization in a single model.

Groves and Thompson argue that there are two independent processes underlying the increases and decreases in responsiveness to repeated stimulation. Eg. SR connection

Opponent Process Theory of Habituation

Solomon and Corbit proposed that the typical emotional response is the result of two independent antagonistic processes that they imaginatively called the a-process and the b-process.

The **a-process** is responsible for the primary emotional response and the **b-process** is the opponent emotional response.

Textbook

Reflexes: a relationship between a specific event and a simple response to the event. It is not a particular behaviour

Modal action pattern (MAP): naturally selected behaviour; a series of related acts found in all or nearly all members of a species.

- Are elicited by a **releaser**.
- Involve whole organism unlike a reflex which is a few muscles/glands

General behaviour traits: are behavioural tendencies with a strong genetic component.