

Human Learning- Psychology, Review Questions- Lecture, Review and Quiz Notes.

Chapter One-Learning to change

Week Two- Habituation and Sensitization

Habituation: A decrease in response to a stimulus after repeated presentations. The ability is very important because it lets us ignore unimportant stimuli which occur repeatedly. An example of habituation is a decrease in your startle response after repeated presentations of noise.

Sensitization: A process in which repeated acts of a stimulus result in progressive amplification of a response. An example of sensitization is an increase in anxiety response after seeing a spider for the second time. This is because the stimuli is intense.

Groves and Thompson's (1970) theory on Sensitization and Habituation:

It specifies that repeated presentations of a stimulus produce changes in the stimulus-response pathway which results in the same stimulus producing a smaller response. This produces habituation of the response and it is specific to the stimulus that is repeatedly presented.

The overall level of arousal of the organism can also influence the size of the response such that increases in arousal can produce increases in the response. This produces sensitization of the response and it is an independent process to the process that produces habituation. Furthermore increase in arousal is not stimulus specific and so neither is sensitization.

1. Learning is a change in behaviour due to experience. Learning ability is the product of natural selection, hence it can be said that learning is indirectly the product of natural selection.
2. The human fondness for sugar and salt/sex illustrates that behaviour that has survival value at one time may be harmful at another time.
3. The sight of a chick with an open mouth reliably results in an adult bird providing food. The chick's open mouth is an example of a releaser.
4. Evolution is the product of variation and natural selection.
5. A reflex is a relation between a specific event/stimulus and a simple response.
6. One example of a general behaviour trait is shy/outgoing/aggressive/passive/adventurous/cautious, etc.
7. Habituation is a reduction in the intensity or probability of a response due to repeated exposure to a stimulus that elicits that response.
8. Learning can be thought of as evolved modifiability.

9. The chief limitation of natural selection as a mechanism for coping with change is that it is slow.

10. Darwin likened natural selection to the breeding of animals.

1. This book takes the natural science approach to behavior.

2. One reason that many learning studies use animals is that with animals it is possible to get greater

control over variables.

3. T. H. Huxley wrote, "Sit down before fact as a little child."

4. The law of parsimony says that the simplest explanation that fits the data is best.

5. The kind of experiment that can be likened to turning a light switch on and off is an ABA reversal design.

6. Between-subjects/group design experiments assume that there are no important differences among participants.

7. A change in topography means a change in the form a behavior takes.

8. Fluency is a measure of learning that combines errors and rate.

9. If there is a reduction in the time that passes before a behavior occurs, we say that learning is measured in terms of latency.

10. The cumulative record measures learning as a change in rate of behavior

Are humans still evolving? How could you prove that they are or are not?

People must not consider evolution as a process that occurred in the past, and us humans and animals are the finished products. People need to understand that evolution is still occurring as long as environments change. Proving that humans still evolve requires identifying changes in response to environmental change. On a practical matter, evolution may be difficult to prove, considering evolution occurs over generations.

Invent a new reflex that would be helpful to humans.

It is difficult to invent a reflex that could be useful to humans, taken that humans already have them. Perhaps a new reflex that could be helpful to humans is gagging induced when food is contaminated by botulism. People happily eat contaminated food and their body does not react in a timely fashion. A gagging response to botulin-contaminated food could save people's lives.

Another useful reflex could be awakening from exposure to smoke. A lot of people die as a result of smoke inhalation during their sleep from house fires and so forth. If smoke caused people to awaken, fewer people would die.

In discussing proposed reflexes, it is useful to ask why they have not evolved. A part of this question could be that evolution is not an intelligent process where the environment decides what a species needs and then builds that particular characteristic. Another part of the answer is that the proposed reflex could lesson low incidence events. It would be useful, however.