

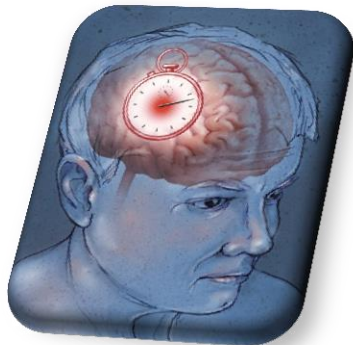
Cognitive Psychology And Learning

Cognitive Approach

- An approach to the study of learning that emphasizes abstract mental processes and previous knowledge
- Cognitive = “knowledge-using”
- Psychologists who use the cognitive approach emphasize that we are able to learn very abstract and subtle things that could not be learned simply through conditioning or social learning

Psychologists and the Cognitive Approach

- We are able to learn very abstract and subtle things that could not be learned simply through conditioning or social learning
- When studying cognition, the focus is on how complex knowledge is obtained, processed, and organized



Complexities of Conditioning

- To omit mental processes from the conditioning equation is to ignore the most interesting and meaningful aspects of human behavior
- Animals – with them,
even “simple” conditioning
is not very simple
 - Cage affects behavior and
so do physical cues from
outside the cage



- Humans
 - Phobias can be cognitive if they have a relation to some kind of natural danger
 - If you are afraid of heights. When you are up high, there is a possibility that you **may** fall.
- Phobias for neutral or unnatural things usually do not occur
 - Ex. A fear of light switches.



Latent Learning

- Learning that is not obvious but goes on under the surface
- If you place a mouse in a maze without food in it, the mouse will still learn something by wandering around.



Thought processes play a large part in our motivation, and also in influencing how desirable a particular reinforcement is.

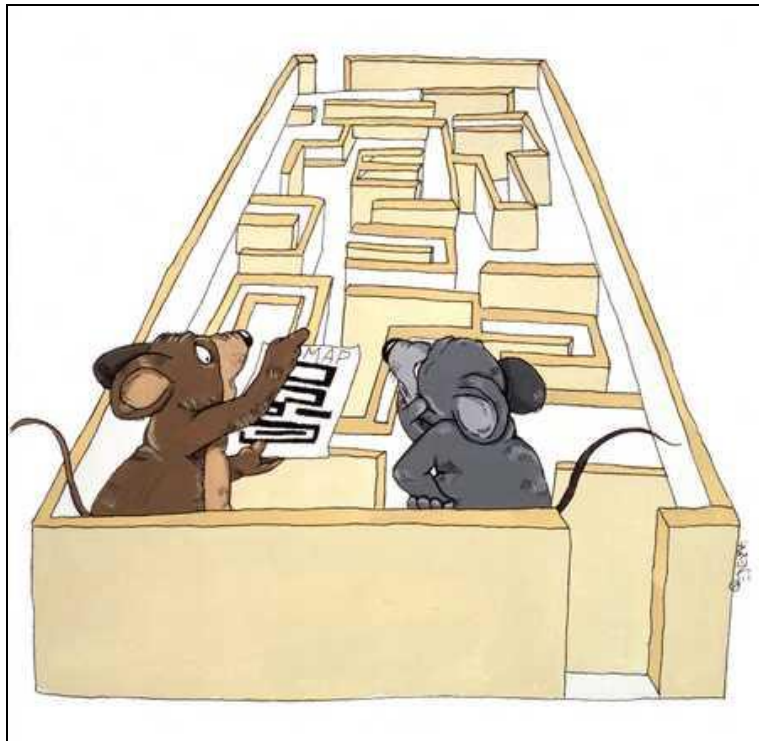
Expectancies – beliefs about our ability to perform an action and to get a desired reward.

If we think we won't be able to do something, then we won't try.

Example: When asking someone out if there is a possibility that “no” will be an answer, we probably will not ask.

Reinforcement Values – preference for certain items or events over others.

- *E.C. Tolman* – a psychologist who argued that the mechanical stimulus-response view was too shallow of an explanation for all learning.
- Cognitive Map – mental image of where one is located in a space (suggested by Tolman).



Edward Chace Tolman

- Strategies – methods that are used to solve problems.

- These are applied in different ways for various problems.

- Chimpanzees were observed in mazes: after being walked through and witnessing 18 bananas being placed in various places in the maze, they could find an average of 12 quickly without duplicating routes (use of strategy and cognitive maps).



- Almost all humans and animals have cognitive maps and use strategies to accomplish tasks such as finding shelter or locating food.

- In an experiment with bumble bees, it was found that the “scout bee” goes out and locates food, and then reports back to the hive to notify the other bees where the food is.

When the food was in the middle of the lake the other bees did not go to the food because it did not believe the scout bee.

