

Biology, Cognition, and Learning

Module 20

What influences learning?

- Biopsychosocial influences
 - Biology
 - Your predispositions
 - Psychology
 - Previous experiences
 - Learning
 - Associations
 - Social-Cultural
 - Social motivation
 - Modeling
 - Cultural preferences

Conditioning has its Limits

- It is easier to condition a response if it is a naturally-occurring behavior
- Sometimes the conditioned response comes over time, rather than an immediate reaction to the stimuli

Cognition affects Conditioning

- Early behaviorists underestimated the power of cognition
 - Assumed all behaviors could be conditioned if given the right CS
- Example: Alcoholics and nausea-causing drugs in their drink

Learning and Thinking are not the same thing

- To behaviorists, learning is simply associating stimuli w/ response
- But cognition is thinking about all the other levels, reasons, costs, benefits, of why we do what we do

Intrinsic Motivation

- To do a task for the joy of the task
- Desire to do an intrinsically motivated task tends to decrease after a reward is presented

Latent Learning

- To learn something but not demonstrate it until needed
- So just because a Behaviorist doesn't see the response doesn't mean learning didn't happen

Observational Learning

- Learning from modeling
- Albert Bandura's Bobo Doll experiment, 1961
- <http://www.youtube.com/watch?v=zerCK0IRjp8>
 - 5 min. 18 sec.

Vicarious Learning & Punishment

- Ability to anticipate consequences via modeling
 - Especially if that modeler is similar to ourselves

Mirror Neurons

- Your neurons fire when you see someone else do an activity (almost as though you were doing it yourself)
- Found in frontal lobe

So be conscious...

- Of your prosocial and antisocial modeling behavior, especially around young children

Be sure you read

- Pg 285 on the possible correlation between viewing media violence and violent behavior