

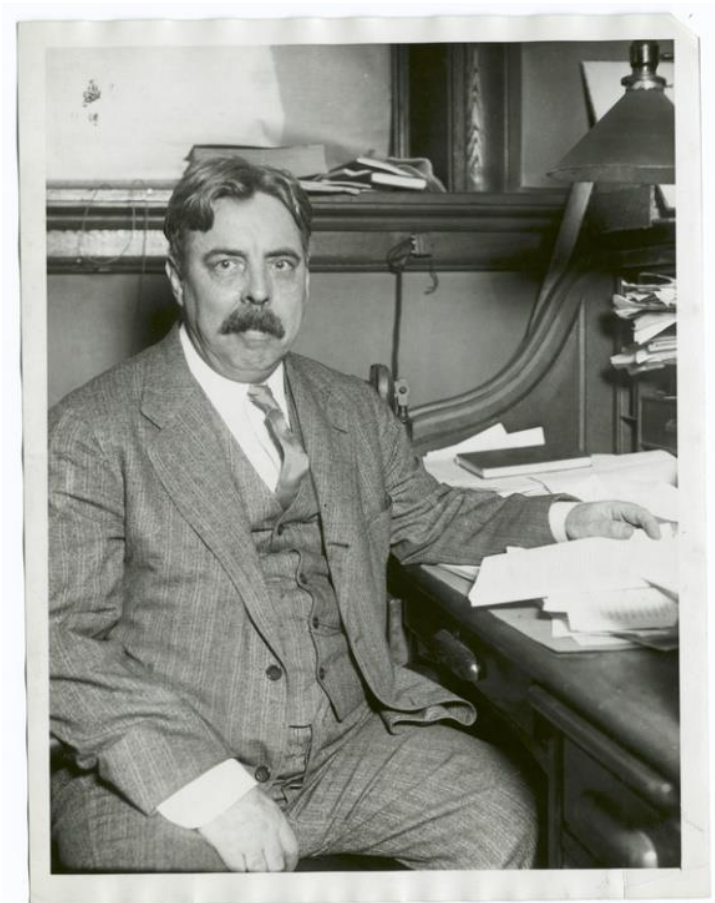
Operant Conditioning

□ Operant Conditioning

- type of learning in which behavior is strengthened if followed by reinforcement or diminished if followed by punishment

□ Law of Effect

- Thorndike's principle that behaviors followed by favorable consequences become more likely and behaviors followed by unfavorable consequences become less likely



Operant Conditioning

☐ Operant Behavior

- ☐ complex or voluntary behaviors
 - ☐ **push button, perform complex task**
- ☐ operates (acts) on environment
- ☐ produces consequences

☐ Respondent Behavior

- ☐ occurs as an automatic response to stimulus
- ☐ behavior learned through classical conditioning

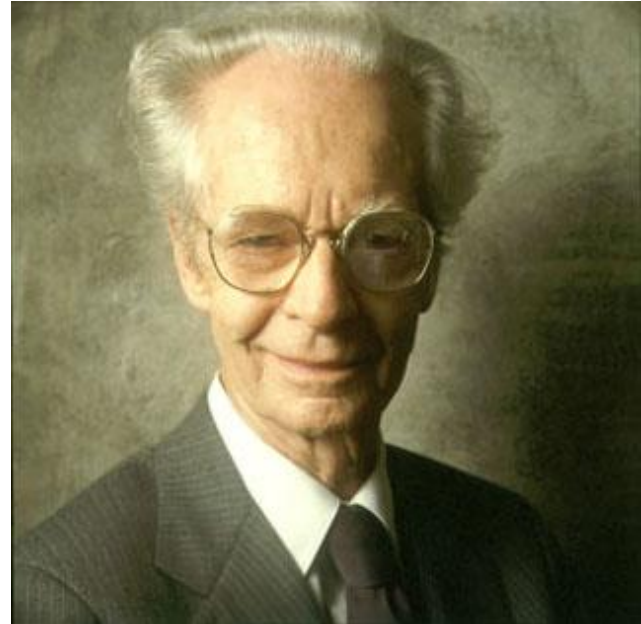
Operant Conditioning

- Reinforcer
 - any event that strengthens the behavior it follows
- Shaping
 - operant conditioning procedure in which reinforcers guide behavior toward closer approximations of a desired goal

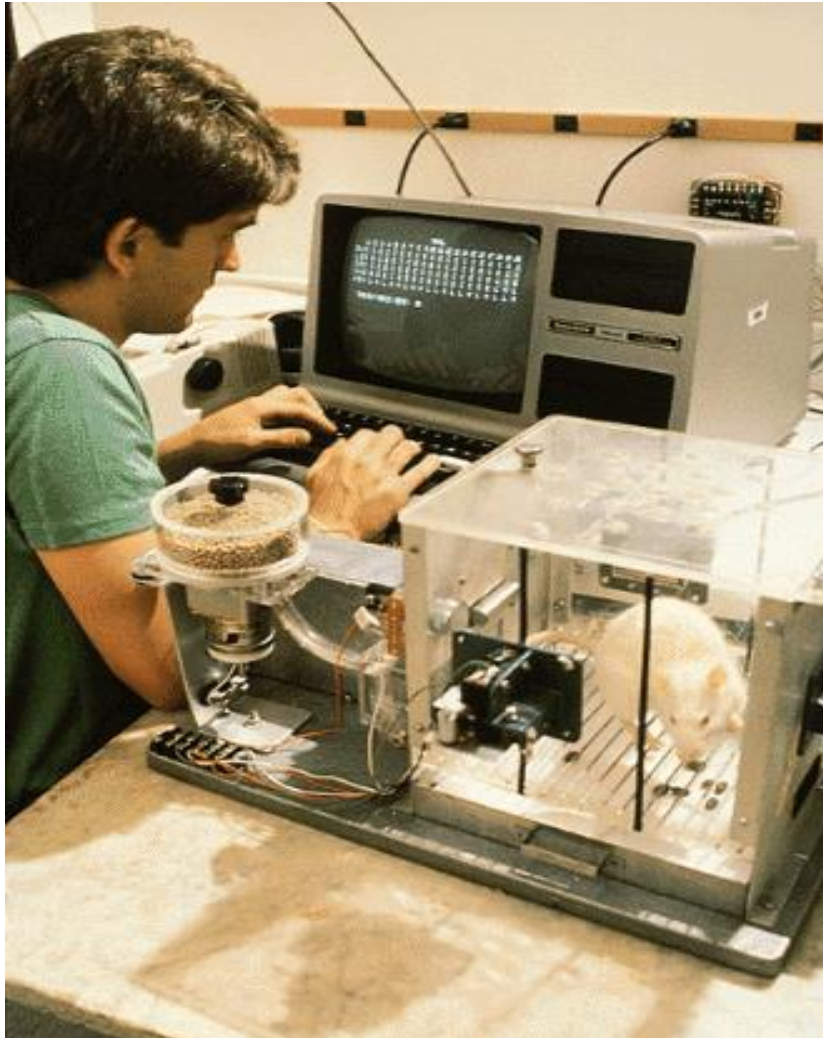
Operant Conditioning

- B.F. Skinner (1904-1990)

- Used a Skinner Box (Operant Conditioning Chamber) to prove his concepts.



Operant Chamber



☐ Skinner Box

- ☐ soundproof chamber with a bar or key that an animal presses or pecks to release a food or water reward
- ☐ contains a device to record responses

Reinforces

- A **reinforcer** is anything the **INCREASES** a behavior.

Positive Reinforcement:

- The addition of something pleasant.

Negative Reinforcement:

- The removal of something unpleasant.



Principles of Reinforcement

- Primary Reinforcer
 - innately reinforcing stimulus
 - i.e., satisfies a biological need
- Conditioned / Secondary Reinforcer
 - stimulus that gains its reinforcing power through its association with primary reinforcer
 - secondary reinforcer

Schedules of Reinforcement

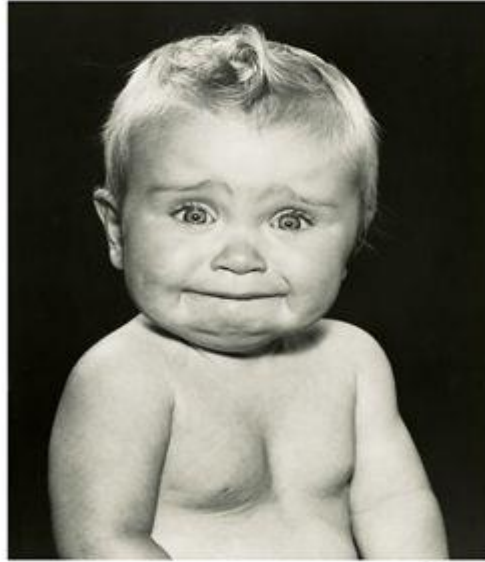
- Continuous Reinforcement (Shaping)
 - reinforcing the desired response each time it occurs
- Partial (Intermittent) Reinforcement
 - reinforcing a response only part of the time
 - results in slower acquisition
 - greater resistance to extinction

Punishment

- Punishment

- aversive event that decreases the behavior that it follows
- powerful controller of unwanted behavior

Punishment



Meant to decrease a behavior.

Positive Punishment

- Addition of something unpleasant.

Negative Punishment (Omission Training)

- Removal of something pleasant.

Punishment works best when it is immediately done after behavior and if it is harsh!

Problems with Punishment

- Punished behavior is not forgotten, it's suppressed- behavior returns when punishment is no longer eminent
- Causes increased aggression- shows that aggression is a way to cope with problems- Explains why aggressive delinquents and abusive parents come from abusive homes

Problems with Punishment

- Creates fear that can generalize to desirable behaviors, e.g. fear of school, learned helplessness, depression
- Does not necessarily guide toward desired behavior- reinforcement tells you what to do-- punishment tells you what not to do- Combination of punishment and reward can be more effective than punishment alone
- Punishment teaches how to avoid it