

Why do people like extra credit?

CLASS OBJECTIVES:
What is Operant Conditioning?
Ch.6-Learning

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Classical Conditioning was a good start but...

- B. F. Skinner believed that more behaviors can be explained through Operant Conditioning than through classical conditioning.
- Also referred to as Instrumental Conditioning

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Who influenced Skinner's work?

- Edward Thorndike was the first to examine this process of conditioning in the 1890's, by placing cats in "puzzle boxes"



The concept of reinforcement

- Thorndike believed that if a response is rewarded then the response is learned.

- _____

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So what's so wrong with Classical Conditioning?

- One problem with CC is the learner has little control over the stimulus or the response.

- Classical Conditioning does not address _____

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B.F Skinner

- Skinner believed that an organism's behavior was directly related to consequences.

- _____

- Skinner only studied overt behavior

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Operant Conditioning

- Conditioning based on the probability that a _____

- This type of conditioned behavior is _____

- Difference between Classical and Operant is that a consequence always follows the behavior.

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- There are four types of Operant Conditioning:

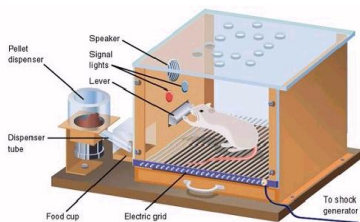
- Positive Reinforcement
- Negative Reinforcement
- Punishment
- Extinction

- _____

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The Skinner Box

- The "*Skinner box*" was designed as a controlled environment with responding mechanisms and consequence delivery



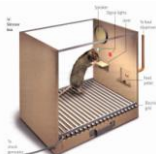
The follow-through

- In Operant conditioning a *consequence* immediately follows a desired response and occur only if the behavior occurs.
- Reinforcers _____
- Punishers _____

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Reinforcement

- A *reinforcer* is any event that **increases** the likelihood of the event or behavior happening again.
- Reinforcers can be positive or negative.



Reinforcement

- *Positive reinforcement* is the **presentation** of a stimulus after a behavior.
- Example- _____

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Negative DOES NOT mean BAD

- *Negative reinforcement* is **the removal** or avoidance of a stimulus after a response.

- Example- _____

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Regardless of which method of reinforcement is used, the end result is the same. The probability that the student will still take the test on time has increased.



Parents often fall victim to the “Negative Reinforcement game”



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■ Avoidance (active avoidance)

- This procedure involves an aversive stimulus that is to be presented some time in the future

- _____

Have you ever Avoided?

- You study before taking the exam to avoid getting a bad grade
- You leave a building during a fire alarm to avoid being burned by the fire
- You leave the by bar by 10:00 to avoid paying the \$20 cover charge
- You change the oil in your car every 3 months to avoid having the car breakdown

Negative reinforcement

- While driving to campus one morning you get stuck in heavy traffic. The next day, you leave home earlier than usual and don't run into heavy traffic. You leave home earlier again the next morning and again you avoid heavy traffic. Your behavior of leaving home earlier is strengthened by the consequence of the avoidance of heavy traffic.

Positive reinforcement

- Martha was a five-year-old girl who attended preschool. She seldom played with the other children. Workers at the preschool began praising and admiring Martha when she engaged in cooperative play with other children. As a result of this procedure Martha's level of cooperative play with the other children increased.

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Positive or Negative Reinforcement?

- Linda buys her 3 year-old daughter candy to stop a temper tantrum.
- George shoots up heroin to prevent the symptoms associated with heroin withdrawal.
- A high school teacher began disapproving of the students' disruptive behaviors when they occurred. This resulted in an increase in the level of disruptive behaviors.
- Diane's supervisor compliments her on her hard work.
- If Billy cleans his room, he will no longer have to stay inside

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“Don’t DO that!!”

How can we weaken a behavior?

Punishment

Extinction

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Is Punishment the same as Negative Reinforcement?

- Punishment is often confused with Negative Reinforcement...but they are NOT the same.
- The goal is different than that of reinforcement.

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Punishment can also be a consequence

- Punishment decreases the probability that a response will occur.
- The process of delivering an unpleasant stimulus, or removing a desired stimulus.
 - Positive Punishment receive something to decrease unwanted behavior
 - Negative Punishment remove something to decrease unwanted behavior

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Examples of Positive Punishment

- A mother yells at her daughter for crossing the street without looking
- Your teacher gives you an F on your exam if you get too many questions wrong
- You get a speeding ticket for going 15 mph faster down the highway than you should have

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Examples of Negative Punishment

- A man's driver's license is revoked for drunken driving
- A child is sent to her room after hitting her sister
- You come home past your curfew and your parents take away your cell phone and car for a week.

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Punishment

- Example- Hitting, grounding, electric shock (hopefully not used on your children ☺)
- **What is the purpose of hitting a child to after an unwanted behavior is displayed?**
- To DECREASE the chance of them doing it again.

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Did you get it?

Negative reinforcement or Punishment

- Because Kathy did not clean her room she must stay inside.
- Your Professor says you won't have to take the final exam because you did so well on your other exams.
- Riley is placed in "time out" because she would not listen to her mother.
- Megan's mom is always nagging her to wash the dishes and when Megan does the dishes, her mom stops nagging her
- A parent takes away a teen's cell phone following a poor report card.

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But, does punishment work?

- There are many limitations of punishment:
 - _____
 - _____
- Inconsistent punishment may lead to learned helplessness

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Extinction

- How would your behavior change if I stopped giving you extra credit when you submitted your flash cards on time?
- The result is a decrease in the likelihood that the behavior will _____

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Schedules of Reinforcement

- Four schedules are based on patterns of intermittent reinforcement.
 - These schedules can be “fixed” or “variable”
- Two are *interval schedules*
 - _____
- Two are *ratio schedules*
 - _____



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Can we learn just by watching?

Albert Bandura-
Social Learning Theory

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Behaviorists say “YES!”

- Bandura suggested that an organism learns new responses by observing the behavior and then imitating it.
- Bandura was interested in explaining aggressive behavior

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What did you see?

- Children who watched violent media were more likely to punch a Bobo Doll afterwards than children who did not watch a violent media.
- Aggression can be learned.



Learned Aggression

- Researchers found that 88% of the children imitated the aggressive behavior.
- Eight months later, 40% of the same children reproduce the violent behavior observed in the Bobo doll experiment. (Isom, 1998).

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Next Class

- Memory

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