

Why do people like extra credit?

CLASS OBJECTIVES:
What is Operant Conditioning?
Ch.8-Learning


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"



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The concept of reinforcement

- Thorndike believed that if a response is rewarded then the response is learned.
- If the response is not rewarded, it gradually disappears.

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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.
- Yes, the dog will make associations between the bell and the food, but can we apply type of learning to daily situations?
- Classical Conditioning does not address voluntary behaviors.

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What would you do?

- A child is playing with your cell phone, which results in it breaking. What do you do?
- Your boss announces that the 2 most productive employees will receive a \$5000 bonus check. Does this change your work behavior?
- **Do these situations lead to learning?**

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Can I change your behavior?

- If you make flash cards for the exam I will give you extra credit points...
- The test starts today...if you take it before Wednesday I will give you 20 extra credit points on that test...
- Every time you are late to class I take 10 points off your final grade...

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B.F Skinner

- Skinner believed that an organism's behavior within the environment was directly related to consequences.
- Meaning, the environment was responsible for behavior.
- Skinner only studied overt behavior

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Operant Conditioning

- Conditioning based on the probability that a behavior will increase or decrease depending on the consequence.
- This type of conditioned behavior is voluntary- not reflexive.
- Difference between Classical and Operant is that a consequence always follows the behavior.

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■ There are four types of Operant Conditioning:

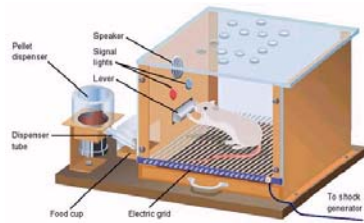
- Positive Reinforcement
- Negative Reinforcement
- Punishment
- Extinction

■ Both Positive and Negative Reinforcement strengthen behavior while both Punishment and Extinction weaken behavior.

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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.

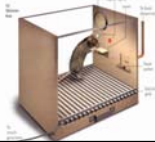
■ Reinforcers *increase* behavior

■ Punishers *decrease* behavior

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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.
- **Name an example**
- Example- If you take your exam on time I will give you 10 extra credit points.

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Negative is not related to good or bad

- *Negative reinforcement* is **the removal** or avoidance of a stimulus after a response.
 - It does not mean unpleasant
- **Name an example**
- Example- If you do not take your quiz on time I will take 50 points off of your final grade

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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.

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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.

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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. _____
- Vanessa constantly complains about her boyfriend to her colleagues at work. Her co-workers get tired of her and no longer provide her with sympathy. _____
- Diane's supervisor compliments her on her hard work. _____

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Primary Reinforcers

- A primary reinforcer has survival value. This is a reinforcer such as food, water, sex or the removal of pain.
- Primary reinforcers do not have to be learned

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Secondary Reinforcer

- A secondary reinforcer acquires meaning when it is associated with a primary reinforcer.
 - Previously neutral stimulus
- These are often used to modify behavior

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Next Class

- What is Punishment? Does it work??

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