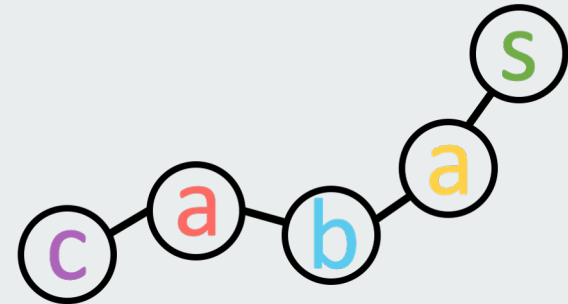





Reinforcement, Punishment, & Extinction





This training program is based on the RBT Task List (2nd ed.) and is designed to meet the 40-hour training requirement for RBT certification. The program is offered independent of the BACB



References

- Cooper, J. O., Heron, T. E., & Heward, W. L. (2020). *Applied Behavior Analysis (3rd ed.)*. Hoboken, NJ: Pearson.
- Behavior Analyst Supervisor (BAS) RBT Study Guide→ <https://behavioranalystsupervisor.com/>
- RBT Task List (2nd Edition)→ <https://www.bacb.com/rbt/>



In This Presentation

C-3 → Use contingencies of reinforcement



Today we are discussing:

Conditioned versus unconditioned reinforcement and punishment

Positive Reinforcement

Negative Reinforcement

Positive Punishment

Negative Punishment



Conditioned versus Unconditioned

Reinforcement

- Unconditioned (i.e., primary) → things that are needed to survive and need NO learning history
 - Food, water, shelter, sleep, sexual stimulation
- Conditioned (i.e., secondary) → strengthens behaviors through its association with primary reinforcers, learned
 - Money



Conditioned versus Unconditioned

Punishment

- Unconditioned→ unlearned, often reflexive
 - Pain, excessive cold or heat, too much light or lack of light, loud sounds
- Conditioned→ neutral things that get paired with aversive consequences and avoided in the future
 - Dogs if you've been bitten



(+) & (-) Reinforcement & Punishment

Let's clarify our terms:

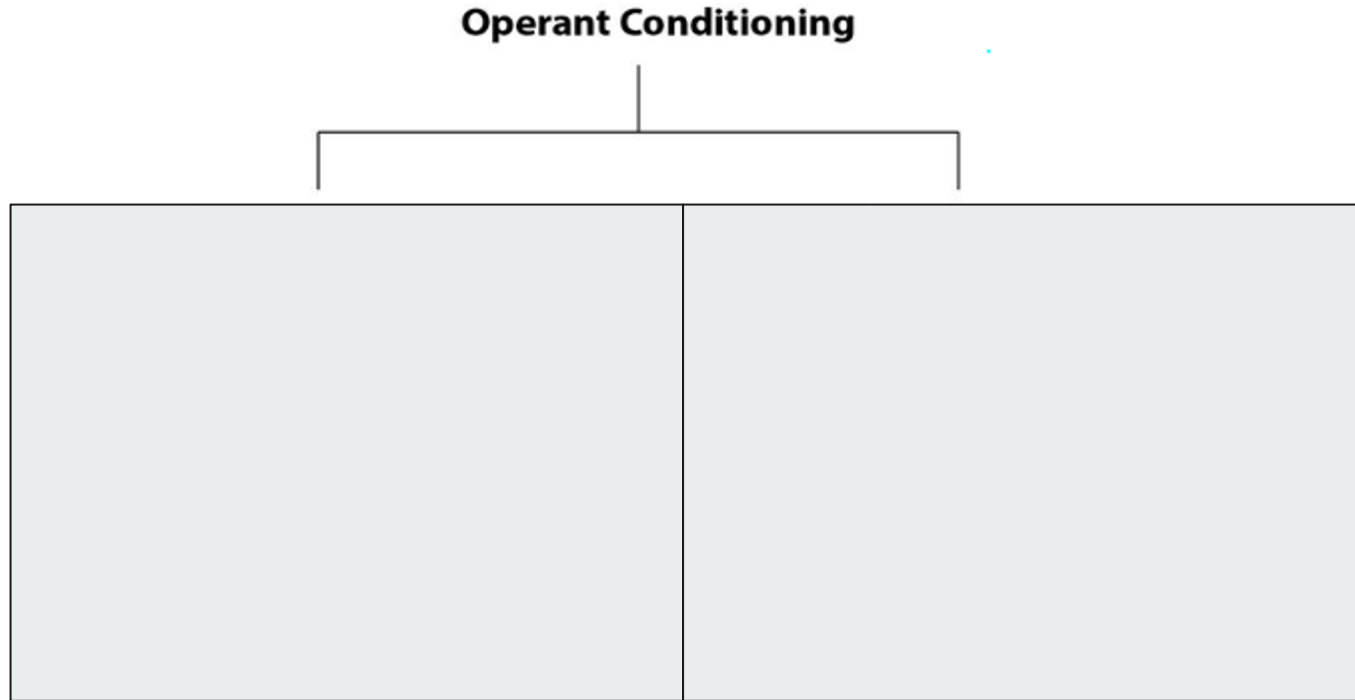
Positive→ PRESENCE of a stimulus or ADD

Negative→ ABSENCE or REMOVAL of a stimulus

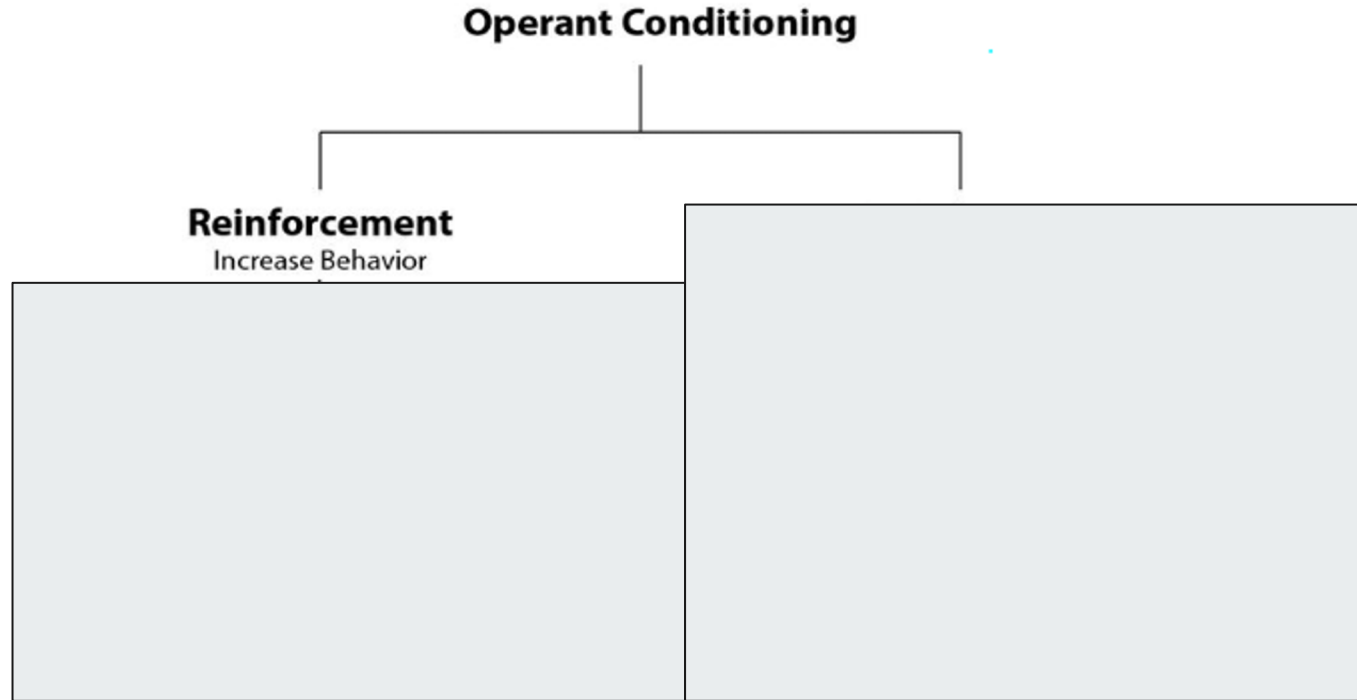
Reinforcement→ INCREASE in the future frequency of a behavior

Punishment→ DECREASE the future frequency of a behavior

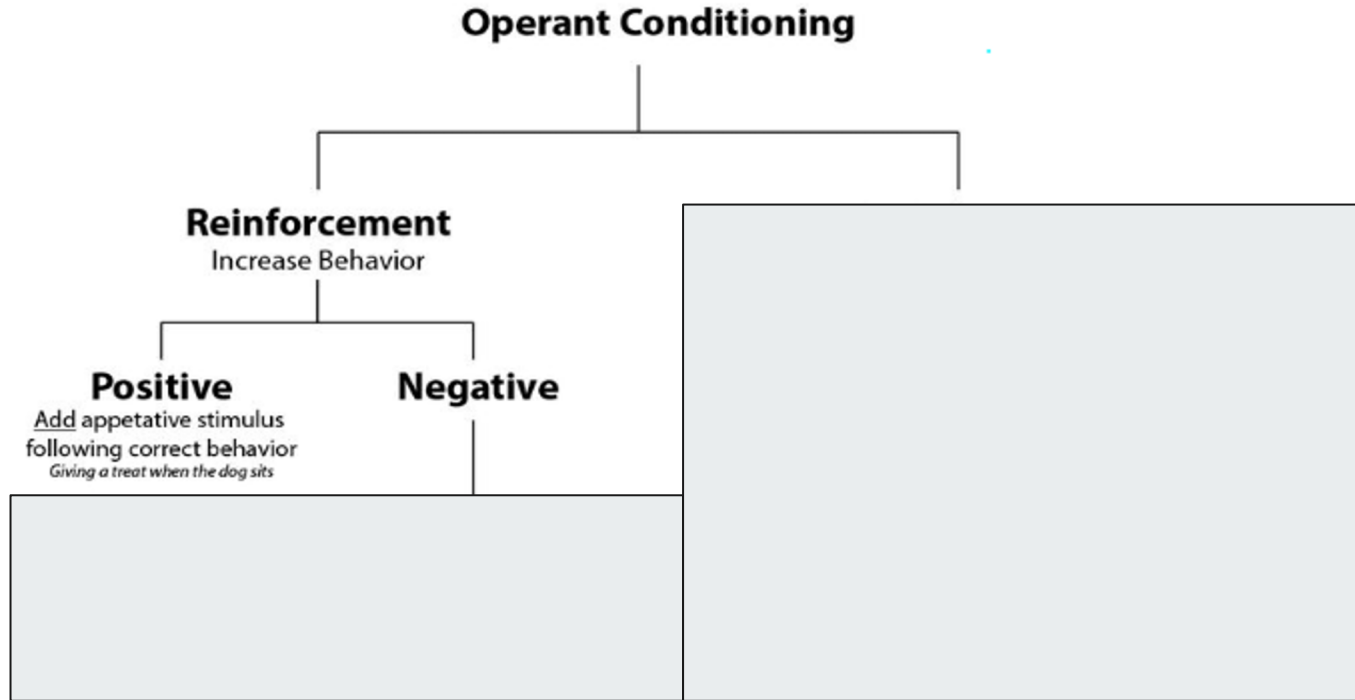
(+) & (-) Reinforcement & Punishment



(+) & (-) Reinforcement & Punishment

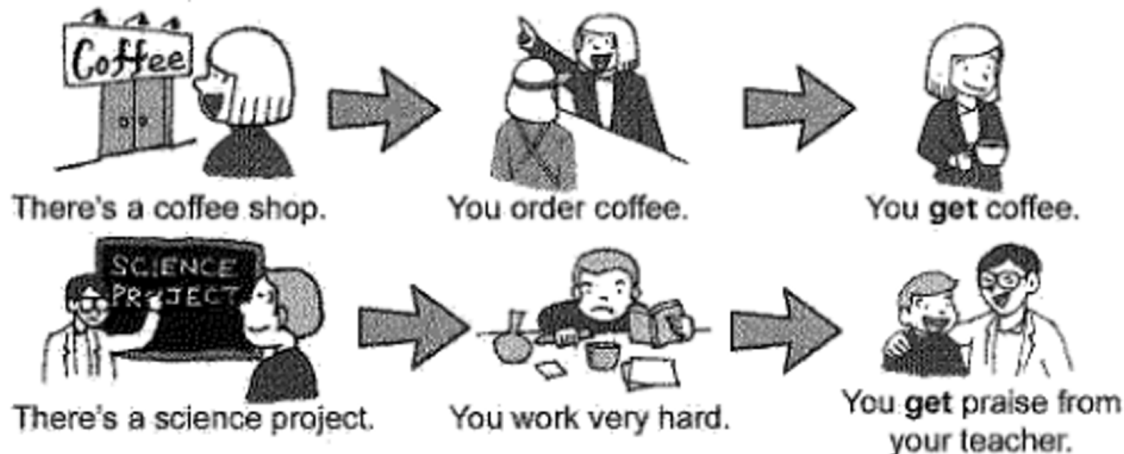


(+) & (-) Reinforcement & Punishment

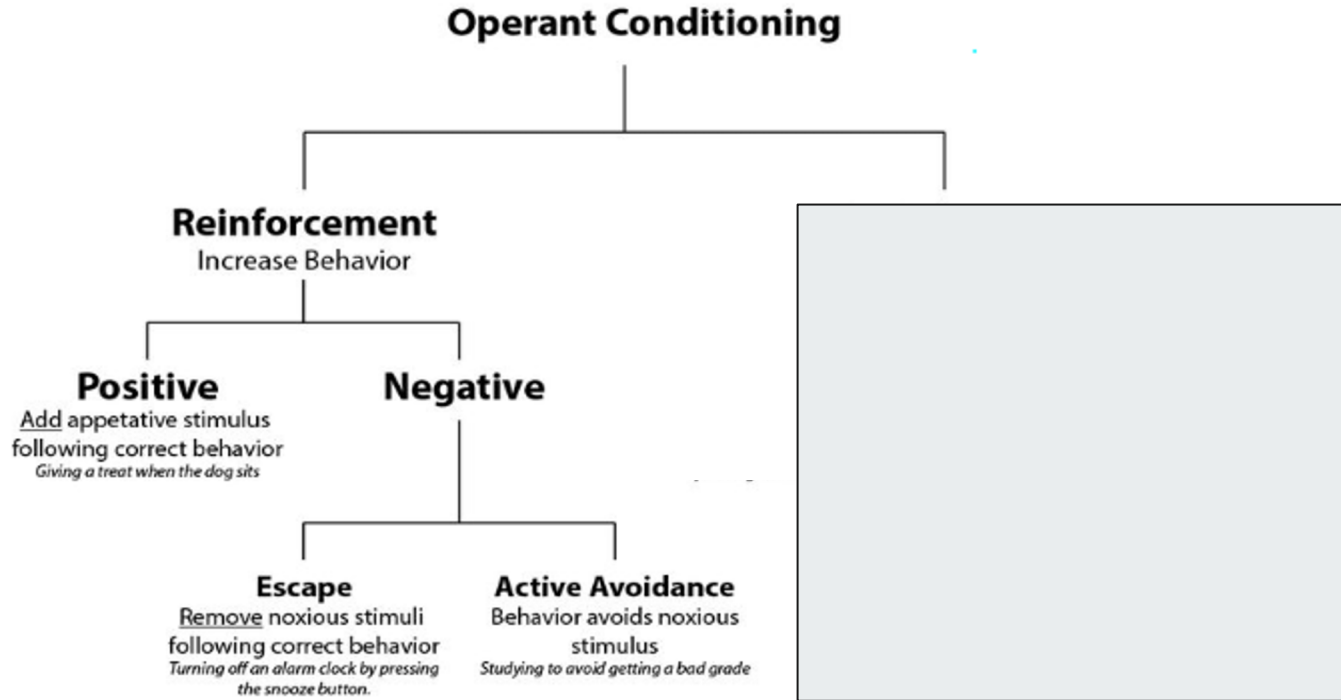


Positive Reinforcement (S^{R+})

Positive reinforcement (S^{R+}) is a procedure that **increases** the occurrence of a target behavior by **providing a motivating stimulus** as a consequence.



(+) & (-) Reinforcement & Punishment



Negative Reinforcement (S^{R-})

Negative reinforcement (S^{R-}) is a procedure that **increases** the occurrence of a target behavior by **removing an aversive stimulus** as a consequence.



It's noisy outside.



You close the window.



The noise is removed.



Bugs are everywhere.

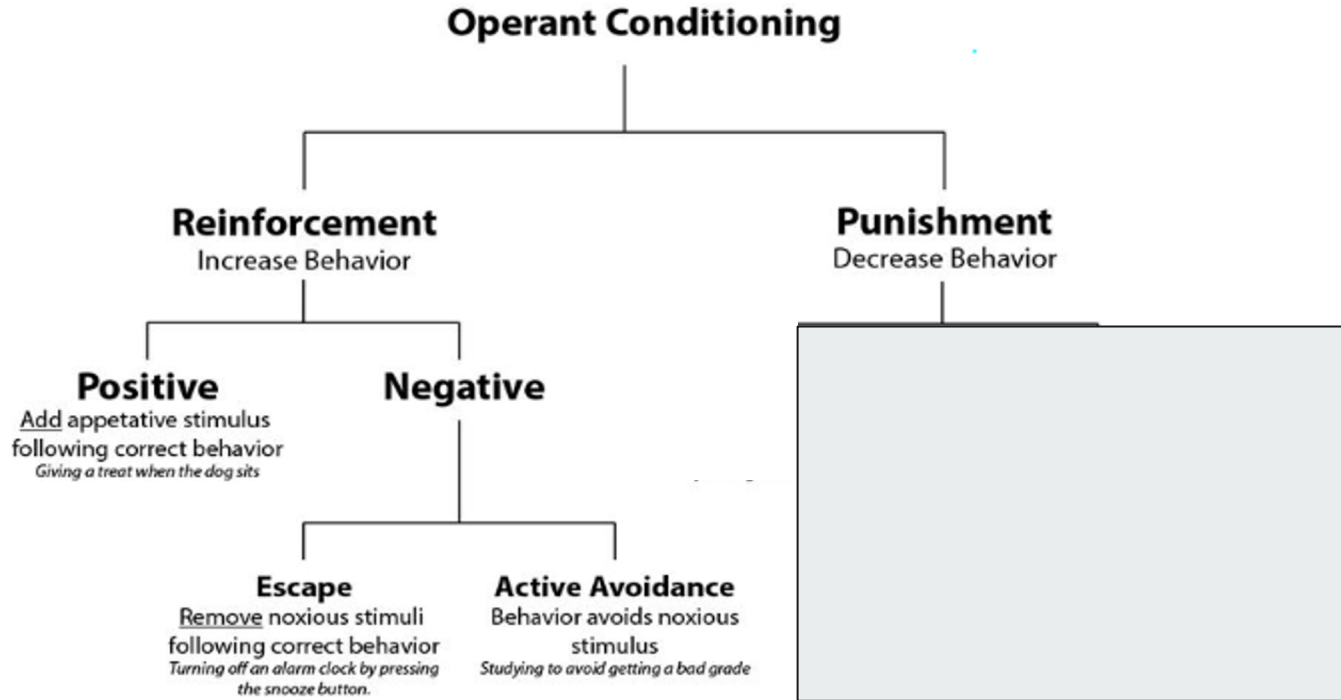


You use a bug spray.

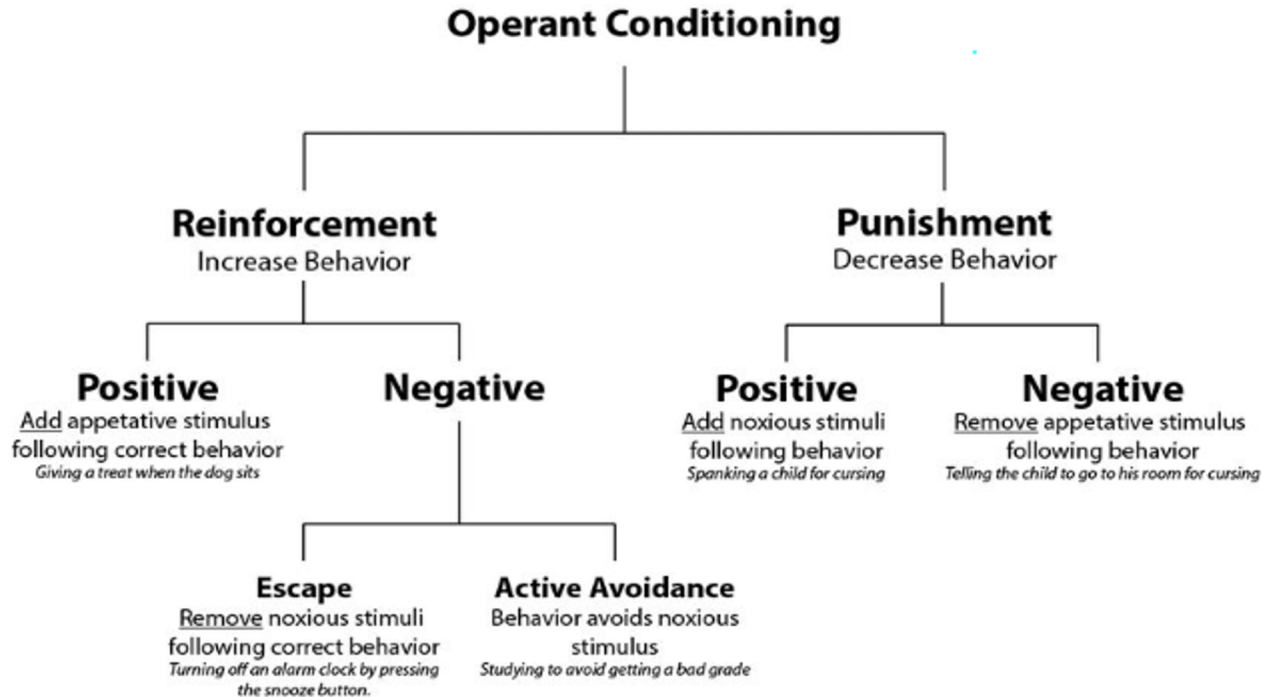


Bugs disappear.

(+) & (-) Reinforcement & Punishment

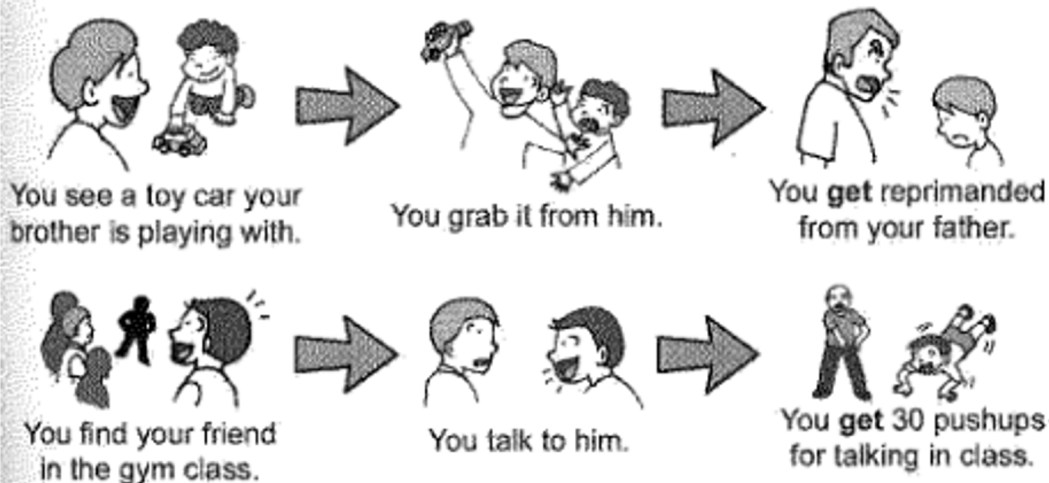


(+) & (-) Reinforcement & Punishment



Positive Punishment (S^{P+})

Positive punishment (S^{P+}) is a procedure that **decreases** the occurrence of a target behavior by **providing an aversive stimulus** as a consequence.

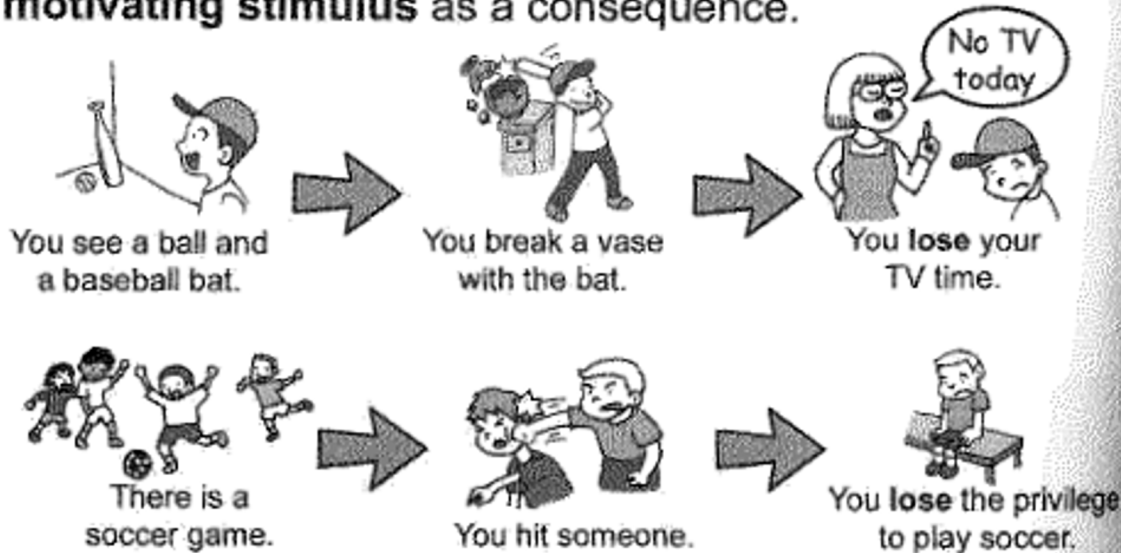


Different Types of Positive Punishment

- Reprimands

Negative Punishment (S^{P-})

Negative punishment (S^{P-}) is a procedure that **decreases** the occurrence of a target behavior by **removing a motivating stimulus** as a consequence.





https://youtu.be/L6u_Guo5LQ0

Extinction



- Reduces behavior by withholding or terminating the positive reinforcer that maintains an inappropriate target behavior
- Characteristics of behaviors on extinction:
 - Resistance to extinction
 - Increased rate of behavior – extinction burst
 - Extinction-induced aggression
 - Spontaneous recovery
 - Imitation or reinforcement by others
 - Limited generalizability
 - Sensory extinction

Extinction Considerations



- Can the behavior be tolerated temporarily based on its topography and on its current rate of occurrence?
- Can an increase in the behavior be tolerated?
- Is the behavior likely to be imitated?
- Are the reinforcers known?
- Can reinforcement be withheld?
- Have alternative behaviors been identified for reinforcement?

- Benoit & Mayer (1974)

Practice Questions



—

1. Examples are food, water, sex, sleep.

A. Secondary reinforcement

b. Primary reinforcement

c. Sd

d. Consequence of behavior

1. Examples are food, water, sex, sleep.

A. Secondary reinforcement

b. Primary reinforcement

c. Sd

d. Consequence of behavior

2. **Examples are money and tokens.**

- a. Primary reinforcement
- b. Secondary reinforcement
- c. Economic reinforcement
- d. Fiscal considerations

2. **Examples are money and tokens.**

a. Primary reinforcement

b. **Secondary reinforcement**

c. Economic reinforcement

d. Fiscal considerations

3. Removing a stimulus which decreases the future likelihood of behavior.

a. Positive reinforcement

b. Positive punishment

c. Negative reinforcement

d. Negative punishment

3. Removing a stimulus which decreases the future likelihood of behavior.

a. Positive reinforcement

b. Positive punishment

c. Negative reinforcement

d. **Negative punishment**

4. Increases the future likelihood of behavior.

- a. Punishment
- b. Motivation
- c. Rewards
- d. Reinforcement



4. Increases the future likelihood of behavior.

a. Punishment

b. Motivation

c. Rewards

d. **Reinforcement**



5. Withholding reinforcement for a target response

- a. Variable reinforcement
- b. Extinction
- c. Punishment
- d. Reinforcement schedule



5. Withholding reinforcement for a target response

a. Variable reinforcement

b. **Extinction**

c. Punishment

d. Reinforcement schedule

6. Adding a stimulus which increases the future likelihood of behavior.

a. Positive reinforcement

b. Positive punishment

c. Negative reinforcement

d. Negative punishment

6. Adding a stimulus which increases the future likelihood of behavior.

a. **Positive reinforcement**

b. Positive punishment

c. Negative reinforcement

d. Negative punishment

7. What occurs when reinforcement of a previously reinforced behavior is no longer provided, resulting in the decrease of frequency of the behavior in the future?

- a. Extinction
 - b. Endangerment
 - c. Pivotal Response Training
 - d. Negative reinforcement
-

7. What occurs when reinforcement of a previously reinforced behavior is no longer provided, resulting in the decrease of frequency of the behavior in the future?

- a. **Extinction**
 - b. Endangerment
 - c. Pivotal Response Training
 - d. Negative reinforcement
-

8. Extremely bright lights, freezing temperature, electric shock are all examples of which punisher?

- a. Conditioned
- b. Unknown
- c. Unconditioned
- d. Secondary

8. Extremely bright lights, freezing temperature, electric shock are all examples of which punisher?

- a. Conditioned
- b. Unknown
- c. Unconditioned**
- d. Secondary

9. Adding something that will motivate a person to increase the likelihood that they will engage in the target behavior again. What type of reinforcement is this?

- a. Positive
- b. Negative
- c. Continuous
- d. Discontinuous

9. Adding something that will motivate a person to increase the likelihood that they will engage in the target behavior again. What type of reinforcement is this?

- a. **Positive**
- b. Negative
- c. Continuous
- d. Discontinuous

10. This follows a response and increases the probability of that response occurring again in the future.

- A. Punishment
- b. Reinforcement
- c. Consequence
- d. Stimulus



10. This follows a response and increases the probability of that response occurring again in the future.

A. Punishment

b. **Reinforcement**

c. Consequence

d. Stimulus

—

11. Money is an example of what type of reinforcement?

- a. Negative
- b. Unconditioned
- c. Secondary
- d. Primary

11. Money is an example of what type of reinforcement?

- a. Negative
 - b. Unconditioned
 - c. Secondary**
 - d. Primary
-

12. For a child who is always picked up when they cry, not picking them up in the future would be an example of...?

- a. Escape
- b. Elopement
- c. Extinction
- d. Negative reinforcement

—

12. For a child who is always picked up when they cry, not picking them up in the future would be an example of...?

a. Escape

b. Elopement

c. **Extinction**

d. Negative reinforcement

13. Food is an example of what type of reinforcer?

- a. Unconditioned
- b. Conditioned
- c. Negative
- d. Positive

13. Food is an example of what type of reinforcer?

a. Unconditioned

b. Conditioned

c. Negative

d. Positive

14. Removing something that increases the future likelihood of behavior is called...

- a. Negative punishment
- b. Negative reinforcement
- c. Positive punishment
- d. Positive reinforcement

14. Removing something that increases the future likelihood of behavior is called...

- a. Negative punishment
- b. Negative reinforcement**
- c. Positive punishment
- d. Positive reinforcement

—