

# DOGSTARS MODULE 2

## ANIMAL LEARNING

- Training Theories

# TRAINING THEORIES

1. The Premack Principle
2. Operant conditioning
  1. Positive & Negative Reinforcement
  2. Positive & Negative Punishment
3. Extinction Bursts
4. Counter Conditioning
5. Classical Conditioning

# 1. THE PREMACK PRINCIPLE

- The [Premack principle](#) is a special case of reinforcement elaborated by [David Premack](#), which states that a highly-preferred activity can be used effectively as a reinforcer for a less-preferred activity.
- Reinforcement hierarchy is a list of actions, rank-ordering the most desirable to least desirable consequences that may serve as a reinforcer.
- A reinforcement hierarchy can be used to determine the relative frequency and desirability of different activities, and is often employed when applying the Premack principle

# THE PREMACK PRINCIPLE

- Examples of the Premack Principle
  - A dog has to sit before a ball is thrown
  - A dog is asked to lay down before a meal is offered



# THE PREMACK PRINCIPLE

- What would be another example of the Premack Principle?
- Write down four more scenarios that would apply



# 2. OPERANT CONDITIONING

Brings to the table : Reinforcement and Punishment

- Positive Reinforcement
  - R+
- Positive Punishment
  - P+
- Negative Reinforcement
  - R-
- Negative Punishment
  - R-



# 2. OPERANT CONDITIONING

Involves Reinforcement - Positive / Negative

## Reinforcement

- **Positive reinforcement occurs when an event or stimulus is presented as a consequence of a behavior and the behavior increases**
- **Negative reinforcement occurs when the rate of a behavior increases because an aversive event or stimulus is removed or prevented from happening.**



# 2. OPERANT CONDITIONING

Reinforcement - Positive / Negative - Examples

## Reinforcement

- **Positive reinforcement**
  - **Dog sits and they get a treat - the treat is added when a wanted behavior is desired - that behavior is likely to increase**
- **Negative reinforcement**
  - **Attention is stopped when a dog starts jumping on the owner. The attention is removed to reinforce the desired behavior**





## 2. OPERANT CONDITIONING

Involves Punishment - Positive / Negative

- **Punishment**

- **Positive punishment occurs when a response produces a stimulus and that response decreases in probability in the future in similar circumstances.**
- **Negative punishment occurs when a response produces the removal of a stimulus and that response decreases in probability in the future in similar circumstances.**



## 2. OPERANT CONDITIONING

Punishment - Positive / Negative - examples

- **Punishment**

- **Positive punishment - a correction with a spray collar for a dog barking - the addition of the spray will result in the dog not barking anymore for the desired result of no barking**
- **Negative punishment - removing a dog from an environment where they have been jumping on the counter to avoid the behavior from continuing.**



## 2. OPERANT CONDITIONING

- **Think of a few more examples of both -**
  - **Positive and negative reinforcement**
  - **Positive and negative punishment**
- **Keep in mind - when its positive you are adding something and when its negative you are removing something**



# 3. EXTINCTION AND BURSTS

- **Extinction** is the lack of any consequence following a response.
- When a response is inconsequential, producing neither favourable nor unfavourable consequences, it will occur with less frequency.



# 3. EXTINCTION AND BURSTS

## Example of Extinction

- When a dog sits on their own on a greeting instead of jumping up on a person and no reward is given
- Teaching a dog to shake a paw and then no longer request the behavior, the behavior will no longer be offered



# 3. EXTINCTION AND BURSTS

- Extinction Bursts

- This is when the unwanted behavior may get worse before it gets better.
- The dog may offer it in a flurry of attempts to make sure it is not being rewarded still like it may have been in the past
- Make sure you are ignoring the bursts or counter conditioning them to alternate more wanted behaviors.

# 3. EXTINCTION AND BURSTS

- Extinction Bursts
  - This is good to see!
  - It may not seem like it in the moment however seeing a burst of unwanted behavior means that the dog is attempting to confirm that you still don't want it.
  - Stick with the training and dont give up.
  - It will get better very soon
- **Example of an extinction burst**
  - Dog barking when asked to sit
  - We only reward the dog for sitting when not barking
  - A week into training the sit with no bark - the dog starts to bark more
  - Stick with the plan and reward only for not barking

# 4. COUNTER CONDITIONING

- What is Counter conditioning?
  - Pairing one stimulus that evokes one response with another that evokes an opposite response, so that the first stimulus comes to evoke the second response.





# 4. COUNTER CONDITIONING

- For example, a dog is afraid of men wearing hats.
  - When a man wearing a hat approaches, the dog is repeatedly fed his favorite food.
  - The goal is to replace the animal's apprehension with the pleasure elicited by the food.
  - Counter-conditioning must be done gradually, however; if the process is rushed, the favorite food may take on the fear association instead.



# 4. COUNTER CONDITIONING

- When is Counter conditioning used?
  - A. to help shape positive associations to experiences
  - B. positive rewards/feedback can be given when the behavior is offered
- Also to modify unwanted behaviours
  - Sit when greetings with people - instead of jumping up on them



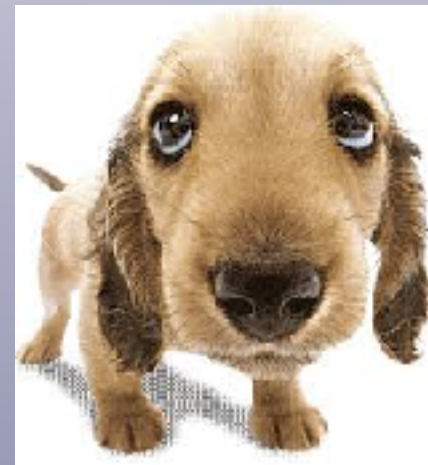
# 4. COUNTER CONDITIONING

- Responsible for involuntary responses
  - Example:
    - Dog gets excited when the leash goes on
    - Dog sits when a treat is presented



# 5. CLASSICAL CONDITIONING

- Simply put - this is responsible for an eventual involuntary response - e.g. a dog salivating when dinner is served - the pavlovian response.
- What are other examples of this - applied to dogs / dogs in training - when the behavior has not be a conditioned response yet?



# 5. CLASSICAL CONDITIONING

- What is a conditioned response?
  - A conditioned response must be learned while an unconditioned response takes place with no learning.
  - Remember the man with a hat and the dogs favourite food ?
  - This is a conditioned response. Learning to accept men in hats is the conditioning we strive for
- An example of an unconditioned response is jumping at the sound of a loud bang or being startled.

# COMPLETION OF MODULE 2

You have now completed Module 2.3 - Training Theories part 1

Please go to Training Theories Part 2

Please review your notes before attempting the quiz.

Happy Training!

