Welcome

Decoding the Woof: Sniffing Out the Science In Dog Training.



Introductions and Parking Lot



Agenda

Types of Training

Discussion: Training Myths

Success Story

Teaching English as a Second Language

* Case: House Breaking (traditional vs science)

Guest Speaker

Training With Evidence Based Practice

- 1. Learning Theory
- 2. Classical Conditioning
- 3. Operant Conditioning

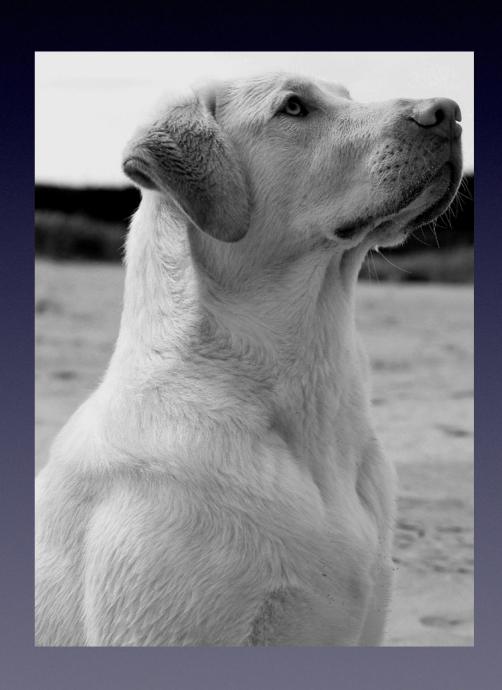
Discussion: Walking Your Dog

Success Story

Guest Speaker

Training Concepts:

- 1. Capturing
- 2. Shaping
- 3. Luring
- 4. Modeling



Agenda

Success Story

Behaviour Shaping and Modification

- * Applied Behaviour Analysis

 * The ABC's of Dog Behaviour

ABC Exercise

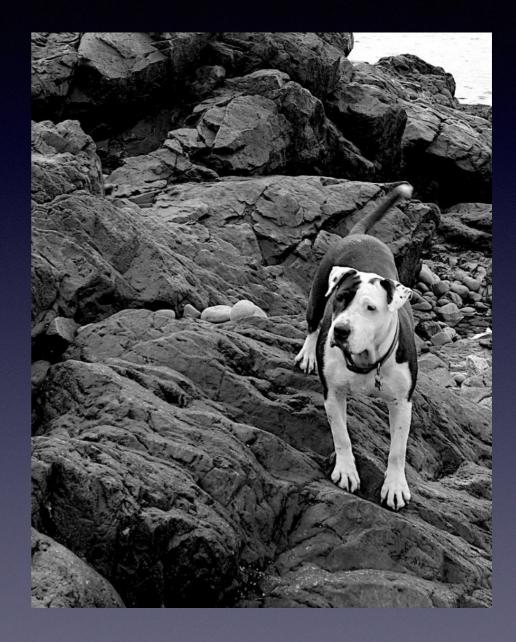
Success Story

Guest Speaker

Aggression:

- a. recognition
- b. types
- c. manifestation
- d. treatment of aggressive dogs
- e. video
- f. discussion: breaking it down

exercise: Saying Hello



Agenda

Guest Speaker

Introducing Dogs

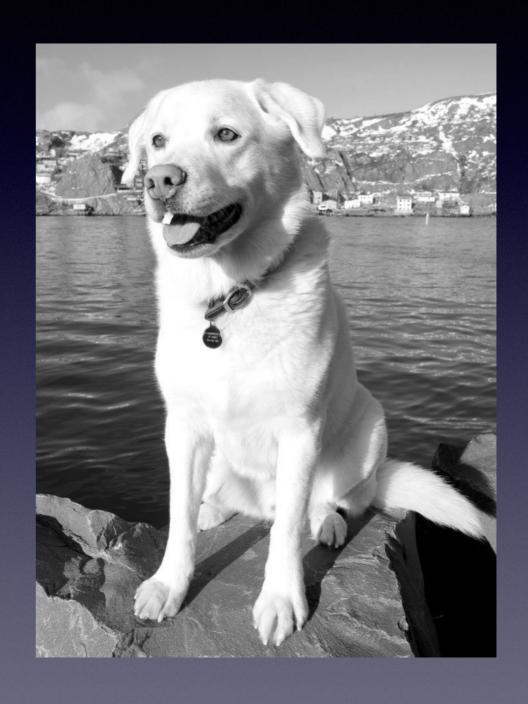
Choosing the Right Dog

Tips to give to new dog owners

Recommended Reading

Review of Parking Lot

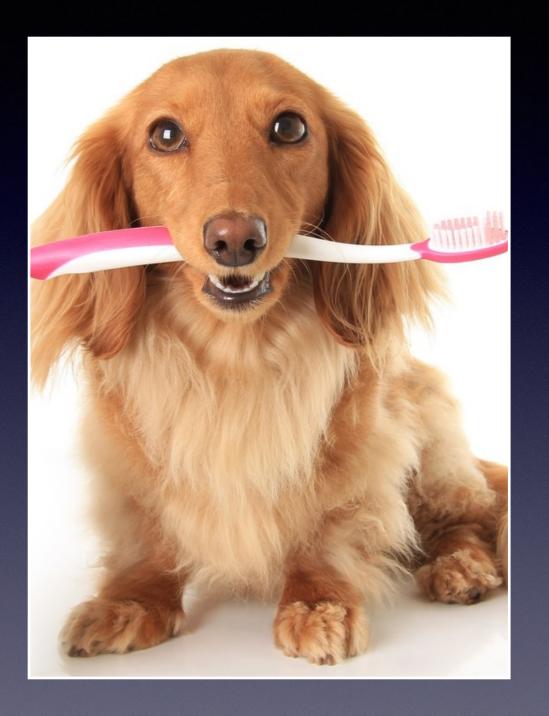
Question and Answers





Dr. Ashley Harvey, Bsc., DVM

Are you providing the best possible dental care for your dog? Find out what could be happening if you are not

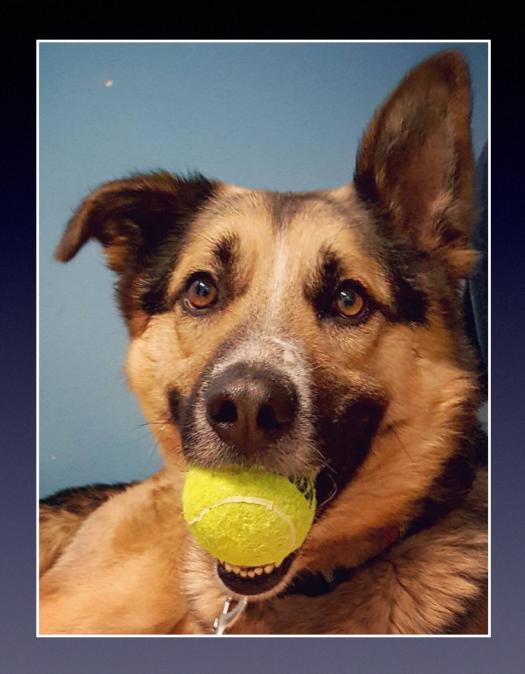


10:30am

Michael Austin: Shelter Manager, St. John's. SPCA

Animal Enrichment Program





1:00pm

Melanie Barnes and Michael Crawford

Search and Rescue





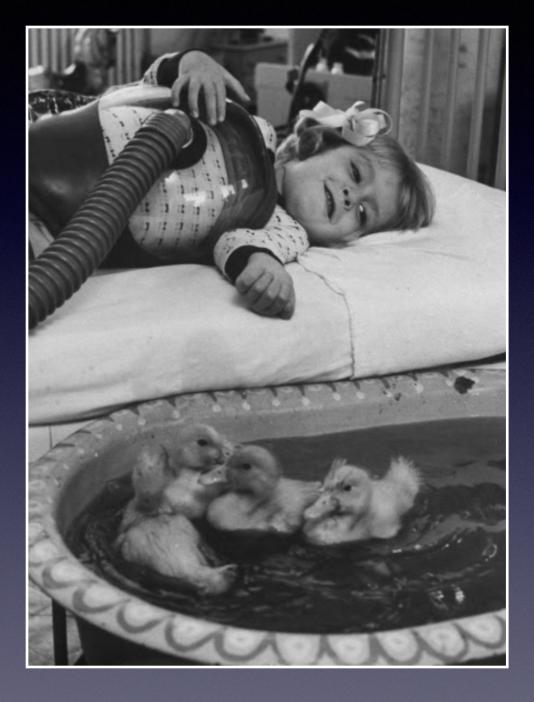
2:00pm

Kelsey Aboud: President Furever Young Senior Rescue

Animal Assisted Therapy



3:30pm



sick child with ducklings being used as therapy animals 1956

Types of Training

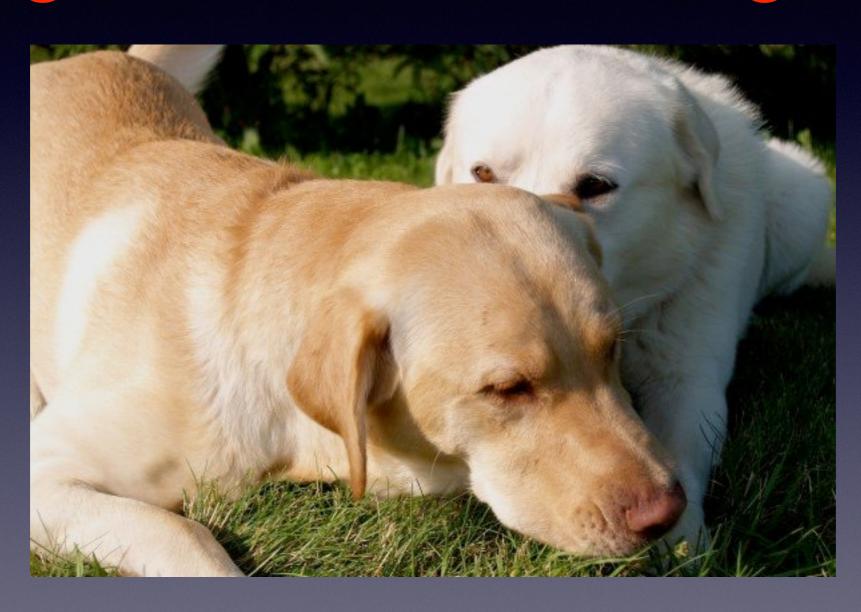
- Stanley Koehler: "Yank 'em and Crank 'em"
- Cesar Millan: Pack Theory
- Dr. Ian Dunbar: Positive Reinforcement/ Training with Feeling/
 Science Based Training
- There is no one correct way to interact and train dogs properly...there are however many ineffective ways that can also be potentially damaging: "the 3 second rule", squirting a dog in the face with water, rolled up news paper, kneeing the dog in the chest



Exercise and Discussion: List some training myths which you have heard over the years

Success Story

Teaching dogs ESL: English as a Second Language



English as a second language

- Dog can learn a vast repertoire of words...
 average dog understands 165 words (Dr. Stanley Coren, 2016)
- Humans have the responsibility to communicate as effectively as we can
- Yelling, harsh tones, punishing....are ineffective and confusing for our dogs



Let's take an example of housebreaking a dog and examine how we can communicate more effectively

House breaking a dog: traditional means

- Dog eliminates indoors
- owner punishes dog
- dog eliminates when owner is not around
- owner believes dog did this to "get back at them" because dog has guilty look
- Owner places dog outside, dog eliminates, dog has free time, gets called back in, owner treats and praises
- Dog eliminates inside again
- Owner claims they have tried "everything and nothing is working"

Where is the disconnect?????

House breaking dog: using ESL

- Accept traditional punishment is a poor means to change behaviour
- Realize that while it is blatantly obvious to you the distinction between peeing indoors and peeing outdoors...it is not blatantly obvious to the dog. There is a breakdown in communication
- Remember dogs think in very binary terms: Action/Behaviour/Consequence
- Missing: solid history of reinforced trials in a desired location ie: outside
- I. Crate dog when no person is present to supervise
- 2. Prepare a structured formalized schedule
- 3. Free periods are for empty dogs
- 4. Immediately interrupt and redirect mistakes
- 5. Go outside with dog, praise and treat elimination immediately (PUPPY PARTY)

English As A Second Language

So what do we do?

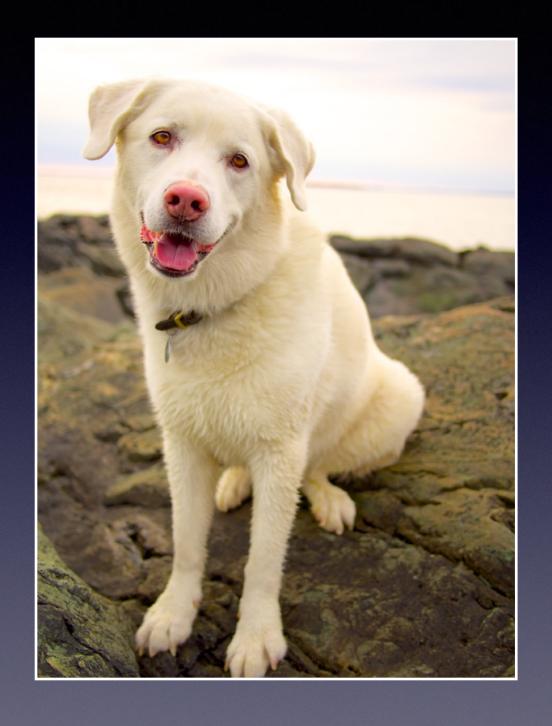
- We have to give up old ways of thinking...traditional punishment is not effective and can often create other more problematic issues.
- We have to be creative, use complex thinking.
- We have to be patient
- We have to put in the time and effort



Training with Science

Using Evidence Based Practice:

Learning Theory
Classical Conditioning
Operant Conditioning



Learning Theory

The use of classical and operant conditioning in order to achieve a desired behaviour.

* dogs commit an action in order to get a desired reaction. If their action gives them the desired reaction, they will continue to do it. If not, they move on to a different action in order to achieve the desired results*

- learning is constantly happening
- it usually involves something being added or removed
- often involves a process in which things that occur together become associated.

Classical Conditioning

Definition: Learning a new behaviour via the process of association.

There are three stages:

- Pre-conditioning Phase: an unconditioned stimulus is paired with an unconditioned response. Example: Producing a ball creates excitement in a dog
- Conditioning Phase: a neutral stimulus is paired with the unconditioned stimulus turning it into a conditioned stimulus.
 Example: Person produces the ball
- Post Conditioning Phase: Conditioned stimulus (person) is associated with the unconditioned stimulus (ball) to produce a conditioned response (excitement)

In the conditioning phase, you can do the same for a negative stimulus providing the unconditioned stimulus is of high enough motivation

Differential Classical Conditioning

Stimulus Absent: Ignore

Stimulus Present: Reassure/Reward

Stimulus Present/Neutal to Positive Response: Mega Reward

Example: conditioning a dog to a loud frightening noise. Noise absent=little feedback. Noise present=reassure regardless of response. Noise present and no response to a positive response= huge reward

Discussion: Vet Visit

Vet visits usually mean exams, needles, handling by strangers...

How can we use Classical Conditioning to trigger positive responses in your dog?



Operant Conditioning

Definition: Changing behaviour through the use of reinforcement or punishment after a desired response.

B.F. Skinner stated there are three types of operants/responses in operant conditioning:

- Neutral Operants: those responses which neither increase nor decrease the likelihood of repeating a behaviour
- Reinforcers: Either positive or negative responses which increase the probability of a behaviour being repeated
- Punishers: Responses which with decrease the probability of a behaviour being repeated

Some Tenants of Operant Conditioning

Primary Reinforcer: Stimuli which are naturally reinforcing usually because they directly satisfy a need. Example: food, water, sex, companionship

Secondary Reinforcers: Stimuli which are reinforcing through their association with a primary reinforcer. Example: toys, leashes, car rides.

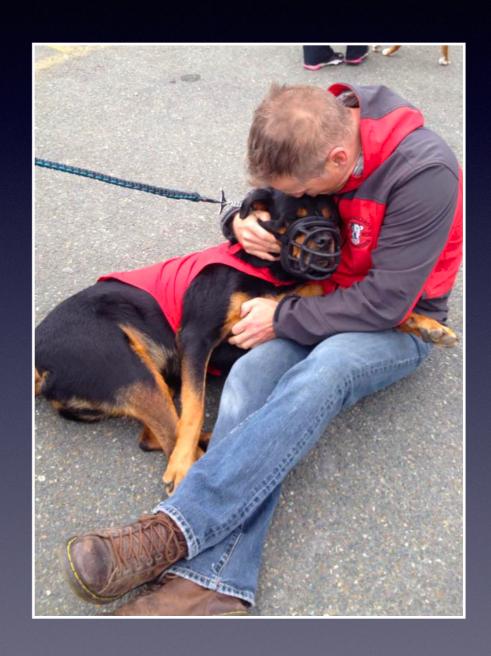
Positive Punishers: An aversive stimulus often involving pain is *presented* in response to a behaviour in an attempt to decrease that behaviour from reoccurring. Example: a leash correction

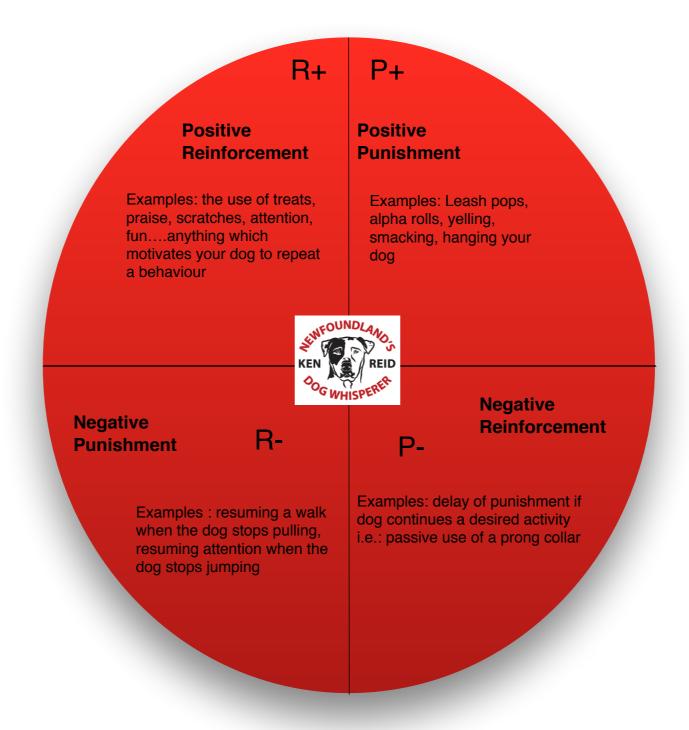
Negative Reinforcer: Not to be confused with a punisher. Negative reinforcers involve the removal of an aversive in order to reinforce a behaviour. Example: starting to walk again when a dog stops pulling

Mega Reinforcers

Reinforcers that either by their nature are super attractive to the dog or reinforcers that have been amped up by their owners

- Food: kibble, treats, smelly treats (fish based), peanut butter, cheese, wet dog food (squeeze bottles), oily/stinky meats
- Toys: ball associated with fetch, squeakers, tug toys
- Play: with owner and with other dogs
- Affection





Note: positive, negative, reinforcement, punishment terms can sometimes confuse people and give the wrong connotations for the practices they represent

- 1. + or means something is added or taken away
- 2. Punishment reduces the frequency of behaviour. Reinforcement increases the frequency of behaviour

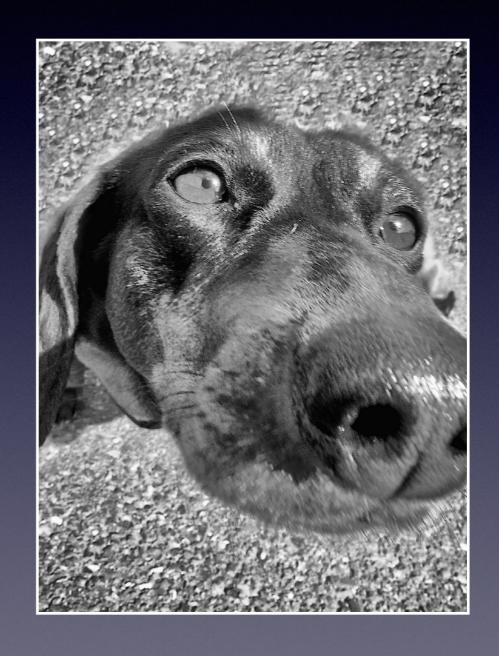
The terms do not reflect the ethics of the practice

B.F. Skinners Operant Conditioning Quadrants: Copyright Ken Reid

Discussion: Walking

What are some examples of operants we can use to increase the likelihood that our dog will walk politely by our side (both positive and negative)?

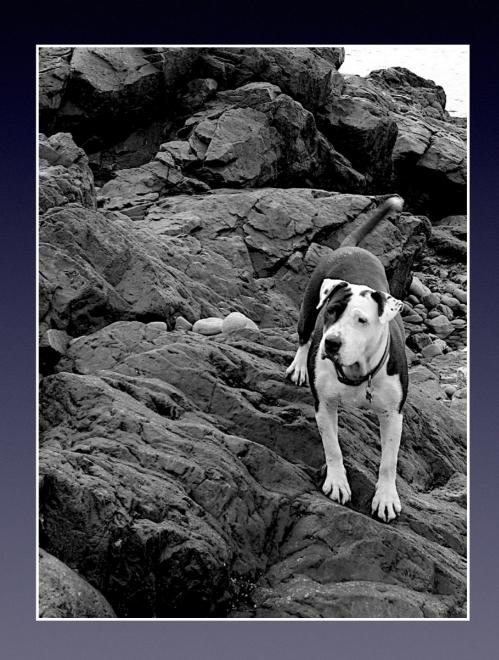
What are some examples that will decrease the likelihood?



Success Story

Teaching Tools

- A. Capturing
- B. Luring
- C. Modeling
- D. Shaping



Capturing Behaviour

Simply involves recognizing and rewarding any naturally occurring desirable behaviour.

- timing and consistency of recognition and reward is so important.
- this is one of the easiest training techniques to use
- it is also the most overlooked technique

Luring

Luring involves the use of treats, food, toys as a means to bribe your dog into performing a desired behaviour. Example: You ask a dog to sit, offer a treat, hold the treat up and over the head, the dog sits and gets a treat.

- It is easy to use but also easy to misuse
- Should quickly be faded into REWARDING
- A lure is used to *produce* a behaviour, a reward is given *after* the dog offers the behaviour.

Modeling

Modeling involves the use of physically positioning your dog. Example: you ask your dog to sit and push down on their hind end.

- unfortunately this training technique is the one most used by people
- Involves no thinking on the dog's part
- achieves the least long term results

Shaping

Shaping involves breaking down a behaviour into its individual components and then rewarding the incremental steps in order to achieve the final behaviour. Example: teaching a dog to come.

- A. Reward the dog for looking at you when you say "come"
- B. Reward the dog for coming toward you
- C. Reward the dog for coming directly to the front of you
- D. Reward the dog for sitting in front of you

Put all the steps together

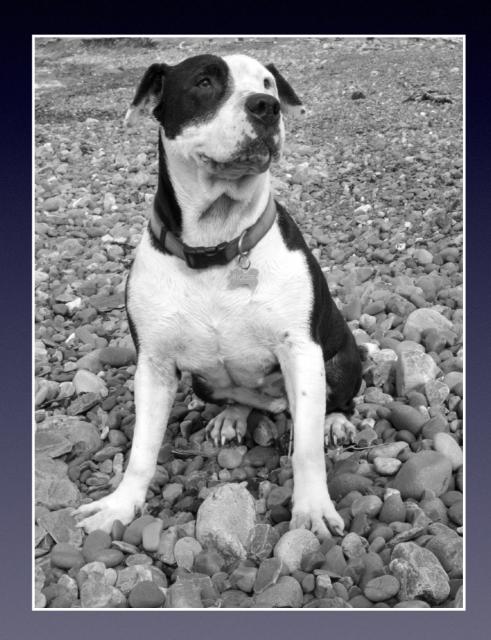
Success Story

Behaviour Shaping and Modification

Introduction to Applied Behaviour Analysis: the ABC's of behaviour

- A. Antecedent
- B. Behaviour
- C. Consequence

refer to ABC Key and Worksheet



Applied Behaviour Analysis (ABA)

- Rose to prominence in the 1960's and in the last decade, has made a large resurgence
- unlike typical behaviour modification which is unconcerned as to why a behaviour is occurring, ABA seeks to examine the why and use it to change the behaviour
- Deeply rooted in learning theory
- One concept at the heart of ABA is to examine the ABC's of behaviour in order to understand and modify the behaviour.

ABC's of Applied Behaviour Analysis

- A. Antecedent: Presenting factors before the behaviour occurs
- B. Behaviour: Response from the subject
- C. Consequence: Results; positive, negative or neutral the subject receives as a result of the behaviour.

ABA theory believes that by manipulating the antecedent and the consequence, you can modify a behaviour.

Fear of Loud Noises

Antecedent: Owner gets nervous in the hours leading up to fireworks display. Fireworks go off

Behaviour: Dog gets spooked

Consequence: Owner comforts the dog, confines them into a room, yells at dog to calm down...

Methods to Manipulate

Antecedent:

Owner remain calm, pretend it is any other day

Expose dogs to pops but control duration and noise level

Expose to lights without the bang (flashing lights, christmas projectors)

Put both together

Consequence: Make it fun for the dog...use classical conditioning concepts covered earlier in the presentation

By manipulating the antecedent and the consequence, you should see a noticeable change in the behaviour.

ABC Exercise

- Get into groups
- Pick a problem you would like to see addressed
- Break the behaviour down using the ABCs: use the ABC Worksheet
- List ways of manipulating the antecedent and the consequence in order to alter the behaviour



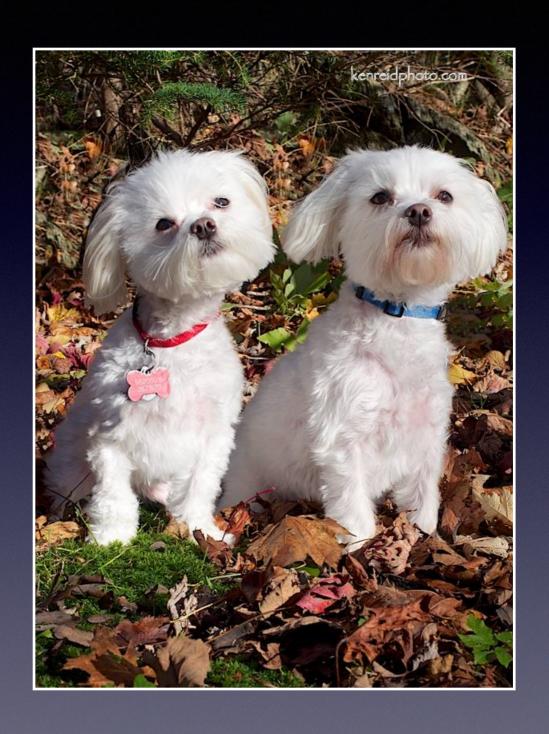
Success Story

Aggression:

Breed is a very poor indicator of aggression (AVMA, 2015)

Aggression in dogs is rarely random nor spontaneous (Miller, 2004)

Most times, aggression is rooted in FEAR (Stilwell, 2013)



Why Do Dogs Bite

It really depends on the model you accept

- Medical Model: Single Cause/Single Problem
- Behaviour Model: Many Causes/Single Problem



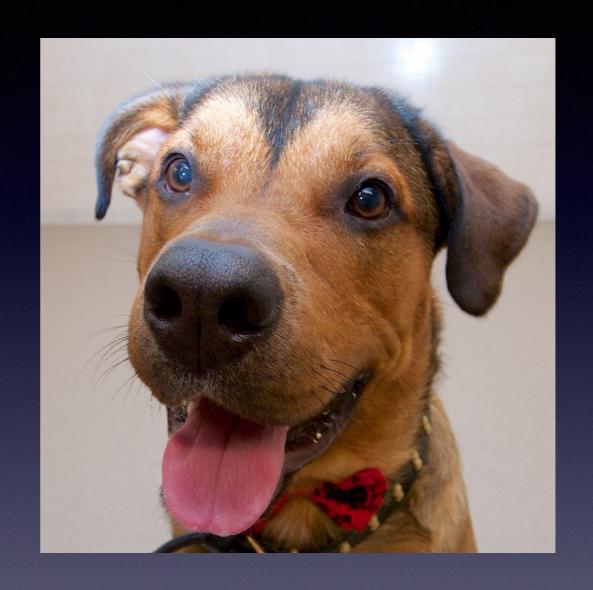
"Why do dogs bite? Because they are dogs." (Dr. lan Dunbar, 2015)

Aggression

- A dog is 3x more likely to be euthanized for aggression than they are for health issues like cancer (Dodman, 1996)
- Breed is a poor indicator of dog aggression (AMVA, 2015)
- There is a plethora of studies indicating certain breeds are more aggressive than others, however the variation of aggression within breed is such that breed is unreliable indicator of aggression (Duffy, 2008)
- Much aggressive behaviour is rooted in Fear, Anxiety and Insecurity (Duffy, 2008)
- Fearful dogs are constantly manipulating social distance ie: move yourself away or move the other guy away...if plan A does not work, go to plan B (flight or fight response: Walter Bradford Cannon, 1915)
- "A dog that feels safe is a dog that is safe to be around"
- Many behaviour problems originate with people, not the dog...bad behaviour is often ignored, encouraged or discouraged through poor means even if people are well intentioned (example: trying to prevent resource guarding around food bowl by randomly taking food bowl away)

Top 7 Subliminal Bite Stimuli: (Dunbar, 2016)

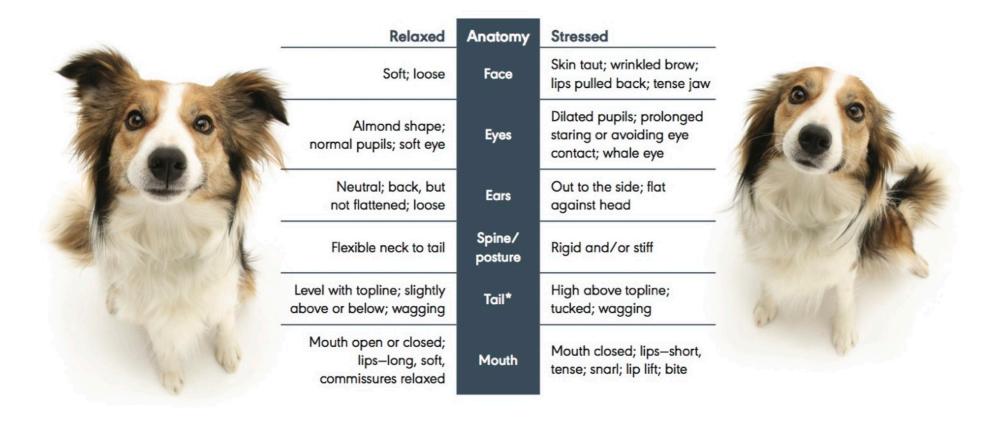
- Collar
- Ears
- Paws
- Muzzle
- Hind quarters
- Hug/Restrain
- Kiss/Eye Contact



Additional: Valued objects, Nature of the Person, Weird and Scary Stuff

Recognizing Aggression: Signs

Body Language and signs of FAS in Dogs





Recognizing Aggression:

Often dismissed as quirky/endearing traits

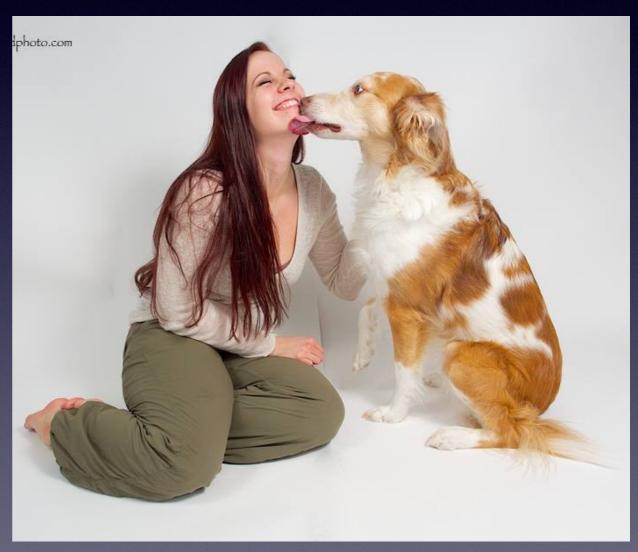
- Mounting people, humping
- Blocking path
- Barking
- Lunging
- Bumping
- Herding



Some Types of Aggression:

 Usually comes in two categories: dog to dog and dog to human

- Dominance Aggression
- Fear Aggression
- Territorial Aggression
- Redirected Aggression



Dominance Aggression

- Most people commonly mistake fear and anxiety related aggression as dominance aggression which is very inaccurate.
- Examples of dominance aggression: dogs who act aggressively when stared at, dogs who dislike being handled, dogs who become aggressive when verbally corrected
- Often challenge children and other members of the household
- Anti-anxiety medication often helps as well as controlling the environment and resources.

Fear Aggression

- Characterized by distance increasing actions: barking, baring teeth, snapping
- Usually defensive
- Sometimes due to medical reasons such as hormone imbalances
- Signs: Tail between the legs, ears flat against the head, shivering, looking away and running away

Territorial Aggression

- When dog gets aggressive protecting territory, possessions, and people
- Often first noticed at 6 months old
- Excitement normally makes it worse
- barking, lunging, growling
- size of territory seems to have some effect on the expression of aggression, ie: short chain, more intense then longer chains...dog may exhibit leash aggression but is fine off leash (fight or flight response). If an animal is behind a barrier, aggressive behaviour will increase 40x (Dunbar, 2015)

Redirected Aggression

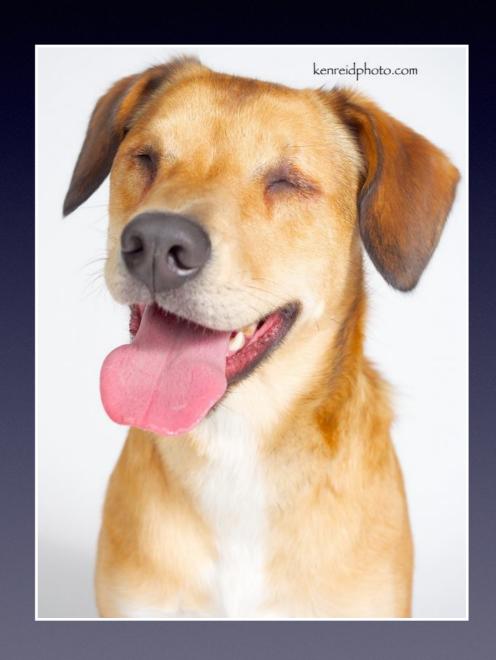
- When dogs cannot take out their aggression on whatever is causing them distress, they turn their aggression toward something or someone else
- Usually involves barriers such as fences, crates, leashes
- The anger can be taken out on another dog, a handler or an object

Reasons for Aggression

- Anxiety, fear, phobia
- Lack of structure
- Lack of Stimulation
- Lack of proper socialization with other dogs and people
- Early imprinting by a nervous or aggressive dam
- Traumatic experience
- Territorial behaviour
- Medical conditions and physical ailments
- Abuse in training by a owner

Some common ways aggression manifests itself

- Leash Reactivity: lashing out at other dogs, people or even the dog's owner
- Collar Sensitivity/Touch Sensitivity
- Predatory Behaviors
- Resource Guarding



Prevention and Treatment of Aggression

There are three types of dog problems: behavioural, training, temperament. Behaviour and training issues can be changed at any time. Temperament problems need to be prevented in puppyhood

The top seven subliminal bite stimuli can be diffused simply by handling neonates.

Early, proper, and extensive socialization is so key

Breeders and owners MUST take advantage of the "Sensitive Socialization Period" (3 weeks to 3 months)...they need to learn that being handled is wonderful.

Important: This cannot wait. If a puppy is not universally approaching by 7-8 weeks, the ball was dropped in the kennel by the breeder.

Prevention and Treatment

Treatment is the same as Prevention, but it takes 1000x longer for lasting solid success (Dunbar 2015)

- Depending on the severity, treatment needs a combination of medical and behavioural intervention
- Need to engage in INTENSIVE and SYSTEMATIC classical conditioning training
- Manage the dog: directly supervise interaction, use of barriers, leashes and muzzles

Treatment of Aggressive Behaviour

- Vet consult to see if there is an underlying medical cause. Consult on possible use of pharmaceuticals (Acepromazine, Benzodiazapine, Alprazolam, Diazepam, Lorazepam, Clonidine, Gabapentin, Trazadone) (Fear Free, 2016)
- If the aggression is serious, have the dog evaluated by a professional trainer (SAFER Assessment, Dr. la Dunbar's Dog Attack and Bite History Scale and tools like these are valuable resources)
- Any dog showing aggressive behaviours needs to be trained out of these behaviours if possible while an analysis of risk versus change is done.
- Each situation and dog is different and will require different approaches. Find what works
- Manage the environment: list the things that trigger the aggressive behaviour and prevent these things from happening...use of crates, muzzles, control interactions, and experiences
- Exercise: boosts serotonin levels
- Structure and management of rewards
- Heavy Classical Conditioning Exercises focusing on gradual systematic desensitization and counterconditioning practices...consulting with a professional is a must.
- Remember: A dog that feels safe is most often, a dog that is safe to be around.



Cesar Millan and Holly: Resource Guarding and What Not To Do:

https://www.youtube.com/watch?v=9ihXq_WwiWM

Group Exercise

Break It Down (Poor Holly)

- Get into Groups
- Discuss Video
- List Signs Holly Showing
- List The Mistakes Cesar
 Made
- List Alternative Ways to Address This Behaviour



Exercise: Saying Hello...

Tips:

- a. Ask First: "May I Pet Your Dog?"
- b. Approach Slowly: Walk slowly and avoid direct eye contact
- c. Allow the dog to sniff: Hands in your pockets or being your back
- d. Touch: one hand under chin, collar to bum
- e. Thank You
- f. Walk away slowly



Introducing Dogs

Demonstration and Exercise

- Dogs to Dogs
- Dogs to Humans



Choosing the right dog

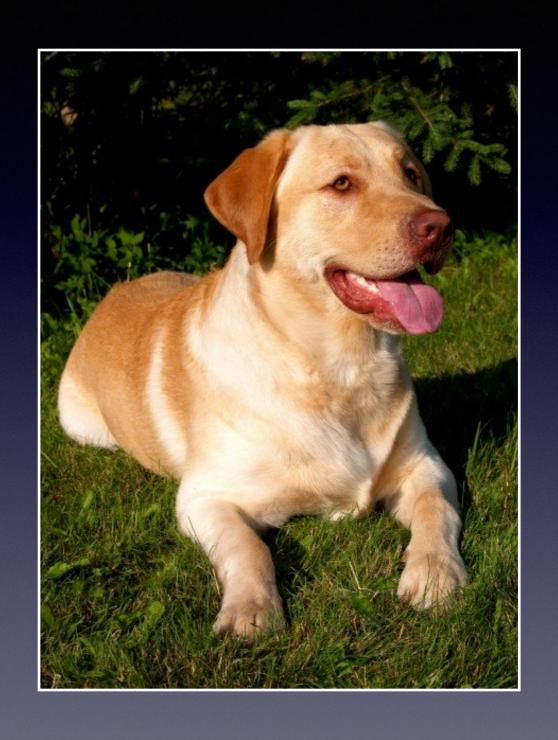


People often spend more time researching what type of car they want than in choosing their dog

Question:

What is the number one cause of death for dogs in the United States who are under the age of three?

Answer: Behaviour Issues (AVMA, 2015)



Tips to give to new owners

- Owners must do their research and know their expectations, limitations and be truthful regarding their ability to commit
- Early, proper extensive socialization is a must (3 weeks to 3 months is the sensitive socialization period)
- Capture Behaviour: Reward positive interactions and behaviours each and every time they happen. Seek out positive interactions and exposures.
- Exercise is not only a good training aid but is also healthy for most dogs and their owners
- Dogs thrive on structure where there is set, understood and fair boundaries, rules and limitations...forget dominance, being an alpha...enjoy your dog.
- Respect a dog for being a dog, respect a dog's dogginess
- A good obedience class is worth every cent you pay for it
- Most behaviour problems originate with the owner and not the dog. Bad behaviour is often encouraged even though most owners are well intentioned
- While genetics play a key, environment shapes the kind of dog you get. Good dogs are created through work, exposure, consistency and time.

More Tips:

- Read Ian Dunbar's "Before You Get Your Puppy" and "After You Get Your Puppy"
- Research your breeder...if a breeder has engaged in ethical breeding practices and correct husbandry, you already have the basis for a good dog.
- Start socialization immediately
- Capture behaviour...consistently and immediately
- Pass The Puppy
- Properly...Expose, Expose, Expose: Remember Classical Conditioning is your best friend

Suggested Reading:

- Jean Donaldson
- lan Dunbar
- Karen Pryor
- Susan Friedman
- Cesar Millan

Review of Parking Lot



Questions and Answers





Thank You For Coming