Introduction to the Veterinary Profession

Module – Care and welfare of domestic animals

Small animal behaviour and communication

Topic 3 – Dogs and cats

Video 7 – Introducing new household members

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Outline of small animal behaviour learning sessions

Dog behaviour

1. Sensing the world and communicating feelings
2. Preventing behavioural problems in puppies
3. Behavioural husbandry of dogs

Cat behaviour

4. Sensing the world and communicating feelings
5. Preventing behavioural problems in kittens
6. Behavioural husbandry of cats

Dogs and cat behaviour

7. Introductions

8. Managing undesirable behaviours

Intended learning outcomes – Dog and cat behaviour

Describe strategies for introducing new animals into a household applying principles of dog and cat behaviour and communication

Explain options for management of undesirable behaviours in order to improve welfare outcomes for humans and dogs

Introductions – why are they important?

Owning multiple animals of the same or different species is common and not all inter-animal relationships are happy.

Unfriendly or aggressive first meetings between cats have been associated with continued fighting (Levine et al.2005. Intercat aggression in households following the introduction of a new cat. Applanim, 90: 325-336)

https://cattybox.com/blogs/cat-tips-facts/i-got-a-new-kitten-and-my-cat-hates-me

Cat-to-cat introductions

What aspects of cat behaviour and husbandry covered previously can be applied to this situation?

Note your thoughts in the learning activity below

https://catingtonpost.com/how-to-properly-introduce-two-cats/

Cat-to-cat introductions

Step 1: Place new cat in a prepared room for several days to a week

Step 2: Scent swapping using a blanket or similar from each cat; visiting the other cat's area

Step 3: Visual contact through a physical barrier

Step 4: Supervised contact

https://catingtonpost.com/how-to-properly-introduce-two-cats/

Dog-to-dog introductions

Step 1: Meet on neutral territory

Step 2: Reward good behaviour when around the other dog

Step 3: Introduce at home through a baby gate, removing items that might cause tension

Step 4: Supervised interactions with separate resource areas until confident they are getting along

https://www.humanesociety.org/resources/introducing-new-dogs

Introducing a new dog to a resident cat

Step 1: Preparation of core safe area for cat; install baby gate and Feliway diffuser (both optional); prepare an area for the dog

Step 2: Animals take turns to have access to the house while the other is confined in its safe place over a few days

Step 3: Introduce at home through a baby gate when the dog is calm, making sure the cat has easy access to escape routes

Step 4: Supervised interactions with escape areas until for the cat until confident they are getting along

https://www.thesprucepets.com/introducing-dogs-and-cats-1117460

Introducing a new cat to a resident dog

Step 1: ?

Step 2: ?

Step 3: ?

Step 4: ?

https://khpet.com/blogs/dogs/introducing-a-dog-to-a-cat-home

Introduction to the Veterinary Profession

THE UNIVERSITY OF MELBOURNE

Module 2 – Care and welfare of domestic animals

Small animal behaviour and communication

Topic 3 – Dogs and cats

Video 2 – Managing undesired behaviour

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7. Introductions
8. Managing undesirable behaviours

# Intended learning outcomes – Dog and cat behaviour

1. Describe strategies for introducing new animals into a household applying principles of dog and cat behaviour and communication

2. Explain options for management of undesired behaviours in order to improve welfare outcomes for humans, cats and dogs

Range of undesirable behaviours

- Normal behaviour (especially for young animals) but annoying e.g. dog does not sit, cat scratching furniture

- Non-pathologic behaviours which are significantly impact the owners e.g. dog barking excessively at strangers passing, cat urinating outside the litter box

- Fear/anxiety problems e.g. fear-based aggression. These are much more complex due to emotional (i.e. unconscious) response

- Three major strategies for management:
  - Behavioural modification (conditioning)
  - Environmental modification
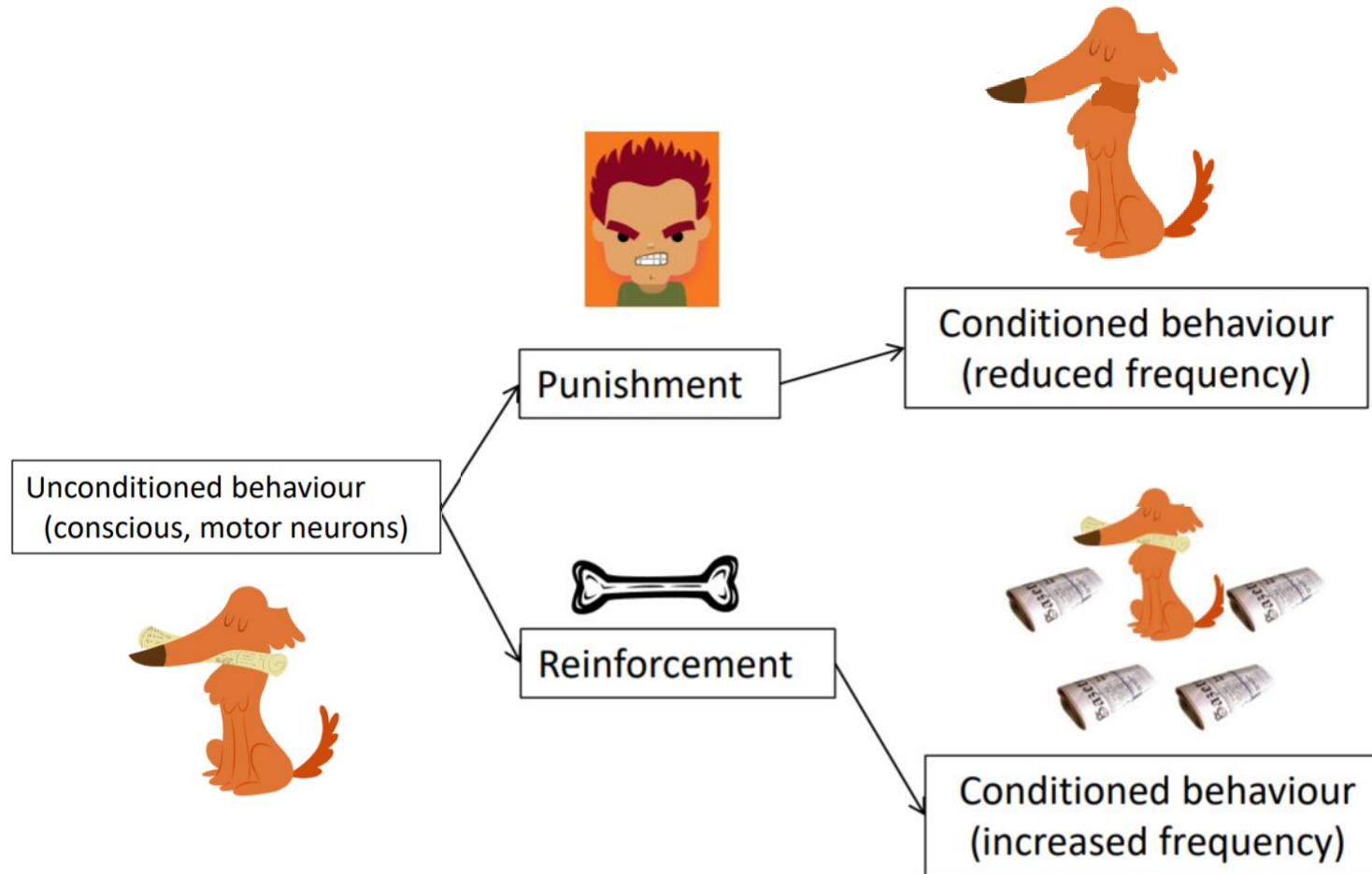 - Pharmacological modification (medication)

Behavioural modification - two major types of learning (conditioning)

- Operant conditioning is about associating a voluntary behaviour and a consequence
- Classical conditioning involves associating an involuntary response and a stimulus

- The type of problem influences the appropriate type of conditioning to use.

https://psychologenie.com/difference-between-operant-classical-conditioning
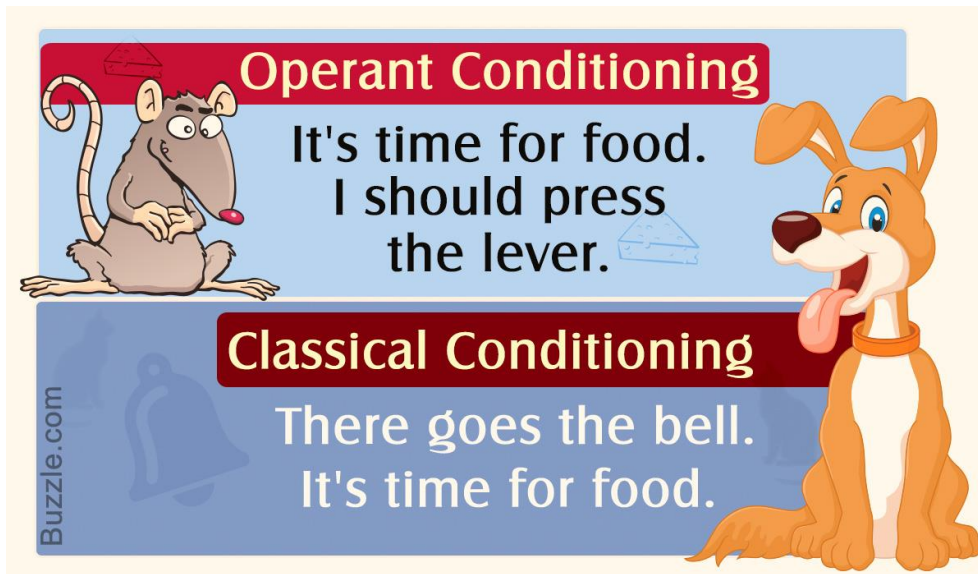
Behavioural modification - operant conditioning - obedience training

- A conscious decision to act (cerebral cortex and hippocampus)

- Reward will increase the frequency of a behaviour and punishment will decrease it

Unconditioned behaviour
(conscious, motor neurons)

Punishment

Conditioned behaviour
(reduced frequency)

Reinforcement

Conditioned behaviour
(increased frequency)

Image: Dr Dennis Wormald

Behavioural modification - classical conditioning – managing emotional responses

- Involves the amygdala (primitive part of brain strongly involved in emotional responses)

- Unconscious learning through pairing of stimuli

- The conditioned stimulus elicits an emotional state e.g. anxiety, fear, sexual behaviours

- Responses elicited are mostly autonomic (adrenaline, pupil size, heart rate, salivation)

- Responses are fast and cannot be delayed

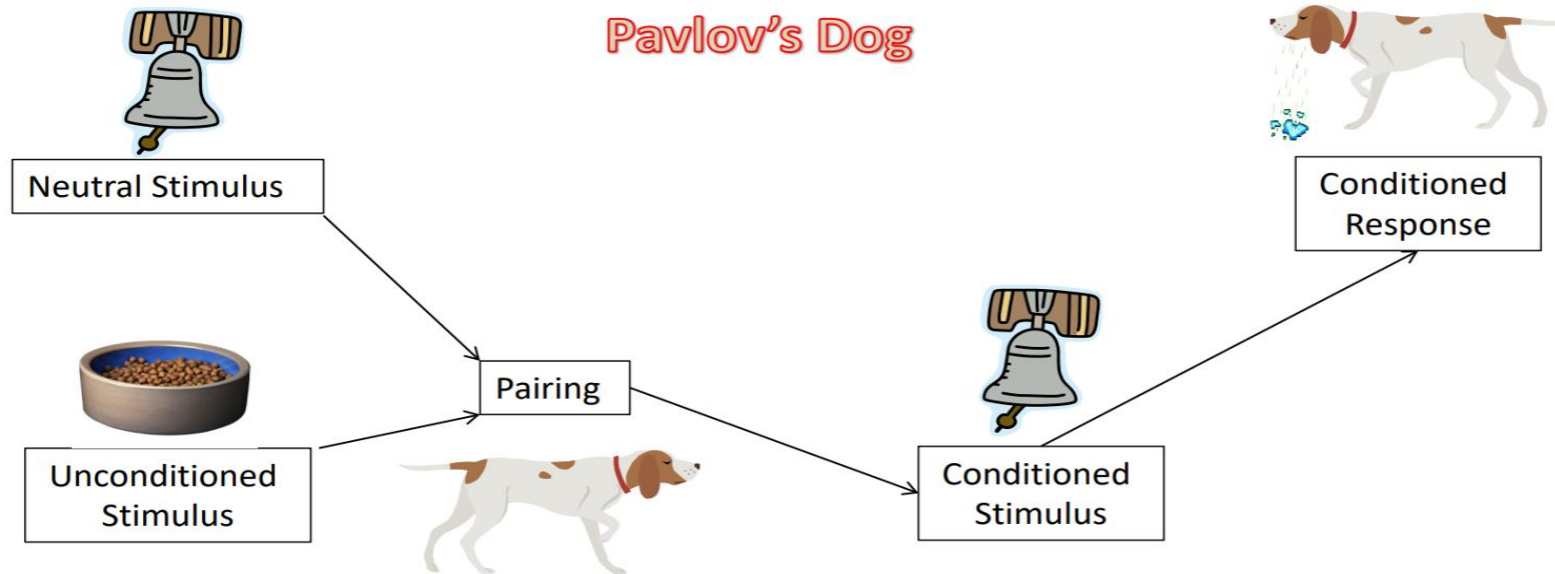- **These responses cannot be rewarded or punished**

Pavlov's Dog

Neutral Stimulus

Unconditioned Stimulus

Pairing

Conditioned Stimulus
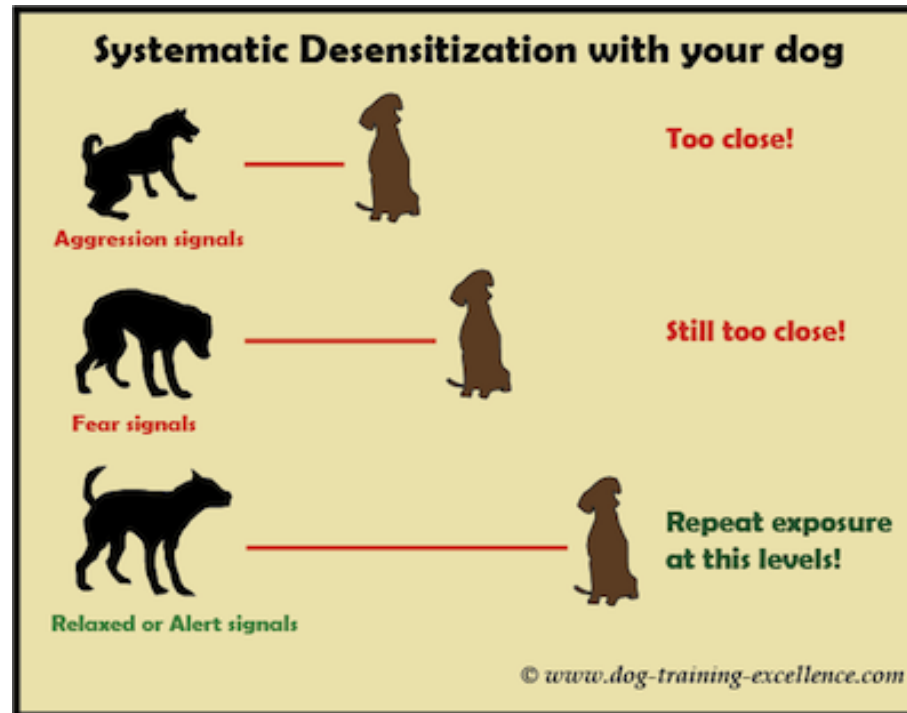
Conditioned Response

Image: Dr Dennis Wormald

- Principles of classical conditioning can be used to modify behaviours using desensitisation and counter-conditioning

Desensitisation - classical 'unconditioning'

Image: Dr Dennis Wormald
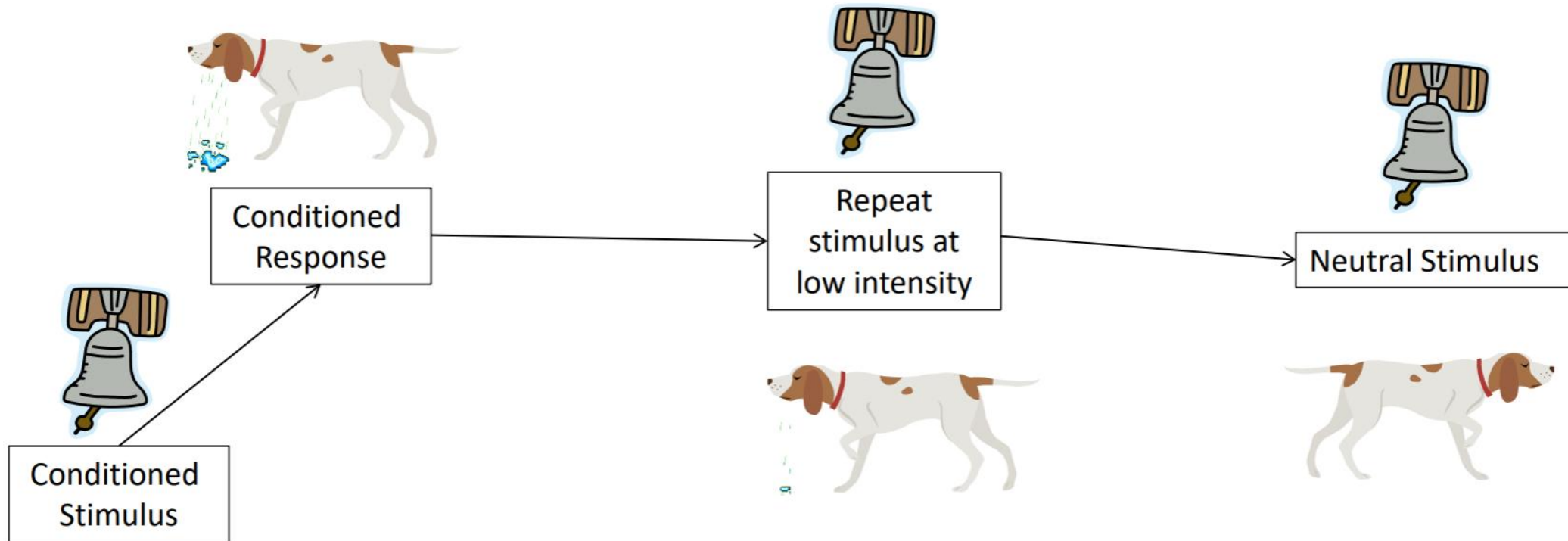
Desensitisation - classical 'unconditioning'

- Very gradual exposure to the scary thing, starting at a very low level and building up very slowly. At every step on the way, dog needs to be happy and comfortable.

- Going too fast may frighten the dog, resulting in sensitisation instead of desensitisation

Dog-training-excellence.com

Classical counter-conditioning

- Used to change the pet's emotional response, feelings or attitude toward a stimulus. It pairs the presence of the negative stimulus (the scary thing) with a favourite reward to change the animal's emotional state.

- Desensitisation and counter-conditioning are often used in combination.

- The video below is an example of using counter-conditioning:

https://www.youtube.com/watch?v=p3_IbNnGr7o

Environmental modification

- Advantages:
  - Often relatively easy
  - Usually reversible
  - Easy to identify changes in behaviour after changing the environment

- Disadvantage:
  - Doesn't address the behaviour

- Dog example: modifying territorial aggression through blocking visual access

- Cat examples: Separation from stressors
  e.g. baby gate,
  Changing litter management e.g.
  cleaning litter trays/changing litter type
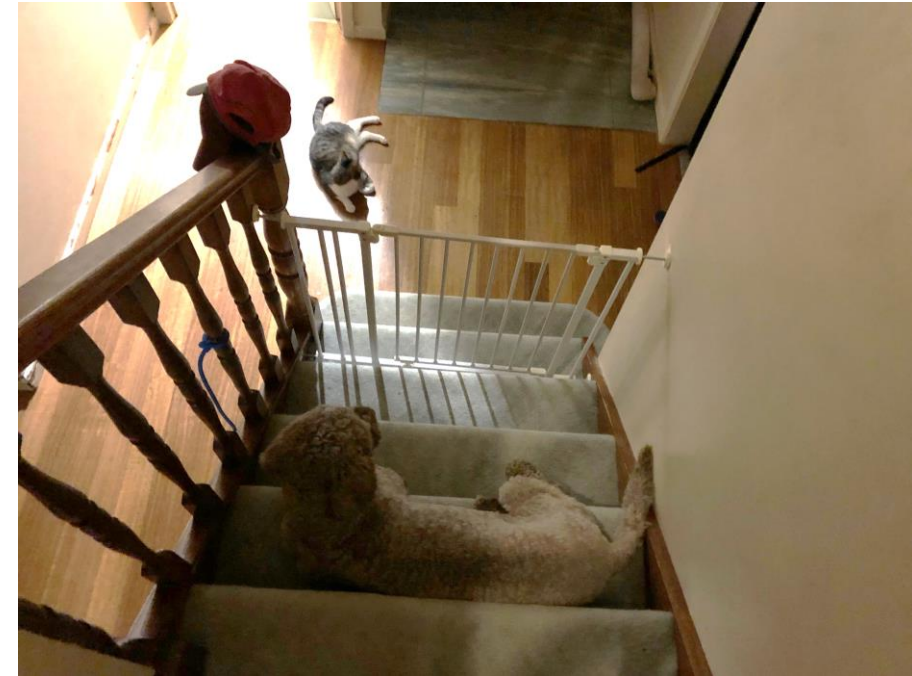
Pharmacological modification - medication

- ## Can reduce fear and anxiety
  - Reduces arousal – high levels of arousal (readiness to act in a given situation) inhibits memory formation and interfere with desensitisation and counter-conditioning

- ## Good welfare for animal and humans

https://www.1800petmeds.com/Fluoxetine-prod10489.html

Range of undesirable behaviours

- Normal behaviour (especially for young animals) but annoying e.g. dog does not sit. Relatively easy to manage with basic training using operant conditioning i.e. teaching the dog a new way to respond to an instruction.

- Non-pathologic behaviours which are significantly impact the owners e.g. barking excessively at strangers passing. Require strategies such as environmental modification and conditioning but can usually be managed successfully.

- Fear/anxiety problems e.g. fear-based aggression. These are much more complex due to emotional (i.e. unconscious) response
  - Modify behaviour using classical conditioning
  - Modify physical environment
  - Modify pharmacological environment

Seeking extra help – veterinary behaviourist

- Veterinary behaviourist consult

  - Significant cost - $400-$800 dollars but brings about some improvement in most cases

  - Will assess animals for underlying medical issues and dispense medication as needed

  - AVA has a special interest group (SIG) centred on behaviour, of which many specialists are members

AUSTRALIAN VETERINARY BEHAVIOUR INTEREST GROUP

Seeking extra help – trainers

- No registration or compulsory qualifications

- Not able to dispense medication

- Quality varies
  - Some trainers are excellent – follow best practice, refer to veterinary behaviourist as required (and behaviourist may refer to them in appropriate cases)
  - Most are good in operantly conditional training

Image:time.com

When nothing helps –rehoming or euthanasia

- Rehoming can be a good solution in cases where environmental modification may change the outcome
- Earlier stats on shelters demonstrate how often this is attempted
- Careful vetting of potential owners to ensure they are aware of and willing to manage the issue

- Euthanasia in behaviour cases needs to be an option where:
  - There is poor animal welfare for which the causes cannot be treated. This may be the best outcome for those animals
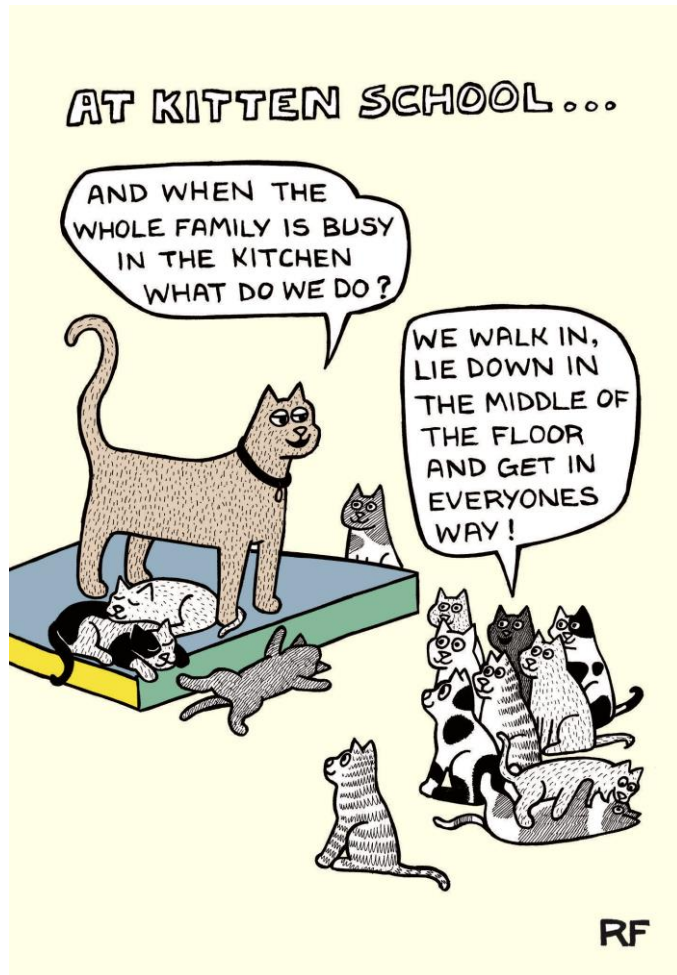 - Where there is risk to human health

Image: ontheprowlcatcartoons

https://ethology.eu/can-two-training-methods-be-equally-good/