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Utilising Learning Theory in Practice

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Science



Equipment

PPE

- Hat, Boots (steel toe cap?), Gloves? Body protector?

Horse

- Head collar/Bridle/ Chifney
- Lead rope/ lunge line
- Schooling whip

Environment

- Safe, good footing, enclosed, quiet





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General Horse Handling

Approach horses quietly and slowly, usually towards head

Monitor horses behaviour as you approach

Scratch lower neck/wither region

Learn to read horses behaviour and
use this adjust your handling skills.

If horse looks away it will generally next
turn/run away so stop, take a step back



7 Methods of Desensitisation

Gradual Habituation

Systematic Habituation

Flooding

Counter Conditioning

Stimulus Blending

Approach Conditioning

Overshadowing



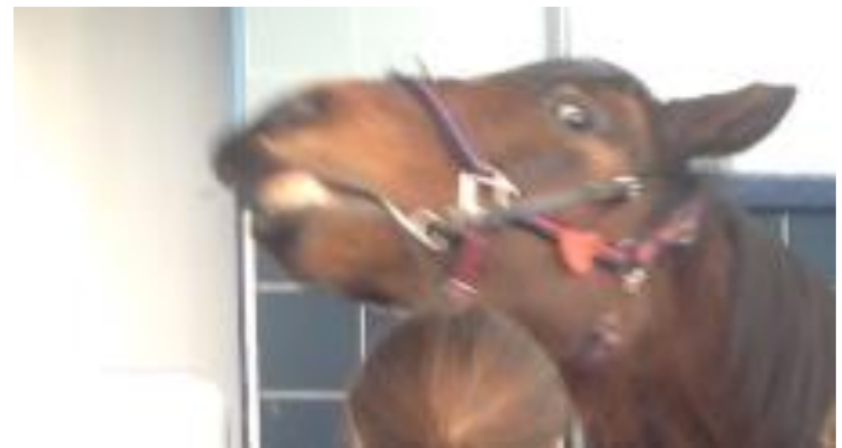
Fear

Easily learned – single repetition

Never forgotten – spontaneous recovery

Associated with how **fast** and how **far** the horse can escape it

Always monitor the arousal levels of the horse



Gradual Habituation

Natural habituation method

Slow, horse is free to escape

Application

- 1) Stable horse next to another getting shod to habituate to the smoke/noise
- 2) Turn a horse out in a field next to a railway/ busy road/livestock



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Systematic Habituation

Flight response is minimised through signals from handler

Horse gradually approaches object or object is gradually brought towards horse

Negative reinforcement may accelerate learning



Flooding

Overwhelming the horse with an aversive stimulus whilst preventing any escape

No place in horse training due to potential for extreme reactions and association of people with fear

Highly stressful

Spontaneous recovery



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Counter Conditioning

Replaces the horses fear response to a stimulus with one that predicts a positive outcome

Utilises classical conditioning

- I.M. injections
- Repeated aversive procedures



Licks



Approach Conditioning

Horses naturally habituate to objects/stimuli they can 'chase'

Ask the horse to walk towards the aversive stimulus

As the horse approaches the stimulus (umbrella, quad bike, gym ball, tractor, livestock etc) should then retreat

Allow the horse to follow the object for a few steps, then ask him to halt for a moment before following again (the object should continue retreating)



Stimulus Blending

Blend the aversive stimulus with a stimulus the horse already readily accepts

E.g. hose the horses legs (acceptable stimulus) and slowly introduce a spray bottle (previous aversive stimulus)

E.g for horses that are head shy first habituate them to a damp towel, then slowly unfold to shape the sensation of the human fingers



Overshadowing

Represents competition of two stimulus for the horses attention

The more intense signal is prioritised, this means the other signal undergoes habituated (sensitisation or learning of the stimulus is reduced)

Very effective technique for desensitisation to most stimuli (clippers, injections, plastic bags etc)



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Overshadowing to Clippers



Overshadowing to Injections

- Key Points

Step horse back and forward until it is light (negative reinforcement)

Find the threshold at which the horse can tolerate e.g. placing hand on neck. At this point the steps will become heavier again

Continue stepping forwards and back at this level until they are light again. Reward by stopping for a few seconds

Repeat process grasping a light skin twitch, each time increasing the pressure then add in the feeling of the needle with cap on pressed against the skin.

Target releasing the pressure i.e. removing your hand each time the horse stands still and relaxes

Only inject once horse ceases to react to pressure of needle with cap on and neck is soft and relaxed.



Overshadowing Injections



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Clinical Scenario

You finish booking your last call at 7pm and rush out the office, heading straight to a dinner party with the in-laws. You **CANNOT** be late

As you enter the car park you see...



Trailer Loading



Do You?

- A) Keep walking and pretend you have not noticed
- B) Tell the client you will send the new intern out to help
- C) Find a lunge line/broom/ etc
- D) Sedate it
- E) Other

Trailer Loading

The problem – The horse is not obedient to the 'Go' signal

It really is that simple!

The solution – retrain the 'Go' signal to obedience level

Most horses that don't load will have habituated to the head collar/ bit pressure so a dressage whip is required to increase motivation



Go



Back up/Stop



Practice Go at the Ramp



Half Way in



Repetition



The Final Result



Take Home Messages

Negative (removal) reinforcement

Shaping

Arousal Levels



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Any Questions?



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