



The use of aversive stimuli in horse training

Ethical equitation is coming into sharp focus in equestrian culture. Concurrently, the alarming death and serious injury statistics have been highlighted in scientific literature (Hawson *et al.*, 2010). Concerns surround the ethics of various techniques in horsesports based on controlling an animal's behavioural responses (McLean and McGreevy, 2010).

Ethical and effective use of learning theory for training responses, demands that excessive and/or prolonged pressure on any part of the horse's body, except via the girth, is avoided because at least it may lead to habituation and the need for greater aversiveness in future, and at worst it can cause pain and stress. In addition, when negative reinforcement (removal of an aversive stimulus to increase the likelihood of a response) is utilised, a minimum amount and period of pressure should be applied to achieve the required response; ensuring that the timing and release of any pressure is appropriate for effective learning to take place (Waran *et al.*, 2002; McGreevy and McLean 2010). Positive reinforcement (addition of an attractive stimulus to increase the likelihood of a response) is also a useful tool in shaping desirable behaviours in-hand and under saddle and, where appropriate, should also be used in training horses. Positive punishment (addition of an aversive stimulus to decrease the likelihood of a response) should be avoided as a training tool because of the documented deleterious effects on learning and the horse/human bond. Behaviour problems in the handled and ridden performance or leisure horse, beyond those caused by health and ability factors, should be primarily considered as dysfunctions in application of learning theory, especially negative reinforcement.

Negative reinforcement is critical for training the appropriate responses to rider/driver/handler rein and leg signals in equitation (McGreevy and McLean, 2007). It has yet to be demonstrated that horses can be safely ridden in challenging environments without adequate training in negative reinforcement of rein and rider's leg pressures. While ethical equitation demands that horses should be trained to respond to minimal pressures the need for human and horse welfare demands that equitation is safe. This is particularly pertinent where children, disabled riders or novice riders are the overriding consideration.

Excessive or over use of the whip, spur or other means of causing fear, stress or pain responses in horses is unethical and of welfare concern. Correct use of learning theory should be applied and correct responses should be rewarded by the timely removal of aversive stimuli (the leg, spur or whip for example). Whipping tired horses, such as is commonly seen in horse racing is of welfare concern and should be actively discouraged (see Evans and McGreevy, 2011).

The importance of disseminating the full knowledge of learning theory (mechanisms of associative and non-associative learning) to all people and organisations involved with horses is imperative for the above mentioned ethical and safety reasons. Such an approach would obviate the need for punishment and other excessive and unethical practises, and will highlight areas of welfare concern where fear is employed and accepted in horse training (McLean and McGreevy, 2010).

Recommendation

The ISES recommends that:

- **Negative reinforcement should involve the use of minimal force. Aversive stimuli used to provoke a response should be used appropriately and minimally so that habituation and stress are avoided.**
- **Appropriate timing and release should be adhered to in all training.**
- **Punishment and fear should be avoided in horse training.**
- **Excessive or incorrect use of any aversive stimulus on any horse, including the whipping of horses to improve their position in a race field, is not condoned.**

References

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