Dog training: new developments and research

By Eloise Cotton

Introduction

Formalised training helps dog owners to understand some principles of animal behaviour. It also begins the process of assimilating the dog into the household by teaching it how to behave appropriately so that a positive canine-human relationship can develop. Lack of obedience training has been identified as a risk factor for the relinguishment of dogs to animal shelters (Miller et al., 1996, Patronek et al., 1996), Dogs that have perceived behavioural problems are also commonly given up for adoption (Salman, 1998; Serpell, 1996). Several studies have provided conflicting results in the debate as to whether training reduces the occurrence of behavioural problems. Jagoe and Serpell (1996) indicate certain problematic behaviours are reduced in obedience trained dogs, but others (Voith et al., 1992) have found no correlation. Clarke and Boyer (1993) report a strengthening of the human-canine bond with training, and with increased quality time spent with the dog. This bond may mean the difference between relinquishment of the animal and seeking other avenues for correction of a behavioural problem (Miller et al., 1996; Marston and Bennett, 2003). The following discussion examines some recent dog training studies. The first study is a questionnaire examining training methods used by dog owners. The use of shock collars in police dog training and its effect on behaviour is then discussed. Finally a look at some recent research into social learning.

Discussion

Hiby et al. (2004) distributed a questionnaire to dog owners in the UK aimed at determining the efficacy and use of different training methods. It was determined that reward-based training was the most successful and frequently applied training method. Owners were asked open questions about how they trained their dogs in basic tasks such as toilet training. They were also questioned about behavioural problems, and how they reacted when the dog misbehaved. Owners who used only punishment or a combination of punishment and reward, reported more problem behaviours, but it remains unclear whether this is a cause or an effect of the training method. In any case the use of punishment did not appear to reduce the incidence of problem behaviours. The survey was limited in that the owners were asked to give information on training that may have occurred several years previously. The qualitative nature of some data also allowed for a rather arbitrary categorisation of some of the training methods that were not obviously reward or punishment based were simply categorised as "miscellaneous".

Schilder and van der Borg (2003), examined behavioural effects on dogs trained using an electric shock collar, in 5 Dutch police dog training groups. They used ear, tail and body posture, and a number of other behaviours, as indicators of stress. Shocked dogs displayed more signs related to chronic and acute stress while training and during a walk in a novel park area. It was determined that the dogs made a connection between the receipt of shocks and both the handlers themselves and the orders the handlers were giving. Unfortunately they did not film the dogs with a neutral person in order to see whether stress responses were related just to the police handlers. Interestingly, the dogs in the police training study that did not receive shocks also displayed indicators of stress while training. These dogs were however, also corrected in a 'harsh' way, such as with prong collars and beatings. Punishment-based training was reportedly used by the police because it can be effective and quick. So while the first study indicated that the methods of punishment used were not effective in correcting problem behaviours, punishment when used correctly and with subtlety can be a successful training tool. Unfortunately it is a tool that can cause stress when used excessively and inappropriately and few owners can recognise either of these faults in their behaviour.

In a study by Kubinyi et al. (2003), the value of social learning was investigated by designing a box from which a ball could be removed in several ways. Dogs in one group were shown by

their owner how to remove the ball by tipping a handle and then got to play 'fetch' afterwards. To see whether the learning was based purely on social learning and not just the reward of the ball, some dogs did not get the ball after manipulating the box. The study demonstrated that social learning occurred despite the absence of an obvious reward. This experiment examined dogs as a social species, using them as a possible model for the investigation of how other species learn. It would be interesting to see how social learning could be applied to obedience training. Social learning can be said to have taken place if subject A learns a behaviour from subject B.

Pongracz et al. (2003) designed a similar experiment in which a dog was required to negotiate a barrier to get a reward. Some of the dogs were shown a detour by the handler and tended to follow this detour, even when a door was opened that provided a shortcut. In another study, McKinley and Young (2003) applied the model-rival method successfully to dog training, determining that it is just as effective as operant conditioning in training a dog to 'fetch' a specific object. The model-rival method has been extensively used in parrots, but this is the first study that has adapted this method to be used in training dogs (McKinley and Young, 2003). In the model-rival method the model-rival acts as both as a model for the behaviour being taught and a rival for the attention of the trainer.

Conclusion

It is important for veterinarians to know what training methods are effective and how dogs learn behaviour. Training is a way of improving the human-canine bond, thus reducing the risk of relinquishment. Dogs that are trained and behaving appropriately will prove to be a valued companion, while those that are not, may become more of a nuisance than a benefit. By improving our understanding of our number one companion animal, we can ensure that training is effective and humane. Dogs are such a social species that undesirable behaviour is often reinforced in some way by handler behaviour. If we can determine on a case-by-case basis how this occurred and design possible remedies, there will be fewer animals surrendered to 'rescue' shelters.

References

Clarke, G.I. and Boyer, W.N. (1993) The effects of dog obedience training and behavioural counselling upon the human-canine relationship. *Appl. Anim. Behav. Sci.* 37, 147-159

Hiby, E.F., Rooney, N.J. and Bradshaw, J.W.S. (2004) Dog training methods: their use, effectiveness and interaction with behaviour and welfare. *Anim. Welf.* 13, 63-69

Jagoe, A. and Serpell, J. (1996) Owner characteristics and interactions and the prevalence of canine behavioural problems. *Appl. Anim. Behav. Sci.* 47, 31-42

Kobelt, A.J., Hemsworth, P.H., Barnett, J.L. and Coleman, G.J. (2003) A survey of dog ownership in suburban Australia-conditions and behaviour problems. *Appl. Anim. Behav. Sci.* 83, 227-245

Kubinyi, E., Topal, J. Miklosi, A. and Csanyi, V. (2003) Dogs (Canis familiaris) learn from their owners via observation in a manipulation task. *J.Compar. Psych.* 117(2), 156-165

McKinley, S. and Young, R.J. (2003) The efficacy of the model-rival method when compared with operant conditioning for training domestic dogs to perform a retrieval-selection task. *Appl. Anim. Behav. Sci.* 81(4), 357-365

Marston, L.C. and Bennett, P.C. (2003) Reforging the bond-towards successful canine adoption. *Appl. Anim. Behav. Sci.* 83, 227-245

Miller, D.D., Staats, S.R., Partlo, C. and Rada, K. (1996) Factors associated with the decision to surrender a pet to an animal shelter. J.A.V.M.A. 209(4), 738-742

Patronek, G.J., Glickman, L.T., Beck, A.M., McCabe, G.P. and Ecker, C. (1996) Risk factors for relinquishment of dogs to an animal shelter. *J. Am. Vet. Med. Assoc.* 209, 572-581

Pongracz, P., Miklosi, A., Kubinyi, E. Topa, J and Csanyi, V. (2003) Interaction between individual experience and social learning in dogs. *An. Behav.* 65, 595-603

Salman, M.D., New, J.G., Scarlett, J.M., Kass, P.H., Ruch-Gallie, R. and Hetts, S. (1998) Human and animal factors related to the relinquishment of dogs and cat in 12 selected animal shelters in the United States. *J. Appl. Anim. Welf. Sci.* 1(3), 207-226

Schilder, M.B.H. and van der Borg, J.A.M. (2003) Training dogs with help of the shock collar: short and long term behavioural effects. *Appl. Anim. Behav. Sci.* 85(3-4), 319-334

Serpell, J.A. (1996) Evidence for an association between pet behaviour and owner attachment levels. *Appl. Anim. Behav. Sci.* 47, 49-60

Turner, D.C. (1997) Treating canine and feline behaviour problems and advising clients. *Appl. Anim. Behav. Sci.* 52(3-4), 199-204

Voith, V.L., Wright, J.C. and Daneman, P.J. (1992) Is there a relationship between canine behaviour problems and spoiling activities, anthropomorphism, and obedience training? *Appl. Anim. Behav. Sci.* 34, 263-272