

2004 Vet's Best Rewards Prize Winner

The effects of current training techniques and environmental factors on dog behaviour

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Introduction

The behaviour of domestic dogs is influenced by different training methods, and environmental conditions. "Problem behaviour" can be a sign of compromised welfare, and is also found to weaken the owner-pet relationship, heightening the likelihood of relinquishment or abandonment particularly in first time dog owners (Hiby et al, 2004). Therefore, the factors affecting the behaviour of domestic dogs directly influence their welfare.

Discussion

The social and physical conditions for pet dogs in suburban backyards significantly affect the incidence of problematic behaviour. Community concerns about dog aggression and the subsequent emphasis on confinement of dogs to their owner's property, has prompted a study into the effects of spatial confinement, exercise, training, and owner demography on dog behaviour and welfare (Kobelt et al, 2003). Registered dog owners in four municipal councils in Melbourne were surveyed, with a total of 203 respondents. Survey questions were forced choice and included a rating scale for severity of unwanted behaviours.

It was confirmed that dogs in Australia are chiefly confined to the backyard. The size of the yard in relation to the size of the dog was found to significantly affect the frequency of unwanted behaviour. That is, large dogs in small yards often displayed unwanted behaviour such as overexcitement, jumping up on people, and excessive barking. This relationship between yard size and behaviour was also found to apply to smaller dogs in a restricted area. Additionally, activity-related problem behaviours, such as pacing and constantly running around, were positively correlated with dogs that were walked less often. Other variables that appeared relevant to the occurrence of unwanted behaviours, included whether owners had previously owned a dog, the amount of time owners spent with their dogs, and whether the dogs had received obedience training. Significantly, it was shown that 35% of the dogs in this study were untrained, and only 20% had received formal obedience training, despite the behavioural repercussions suggested by the data. Aggressive behaviours such as growling and biting were found to be infrequent. However this may be related to the reluctance of survey participants to report these behaviours. Although the causative nature of these results is unresolved, they offer demonstrable links between unwanted behaviour and backyard confinement of dogs in suburban Australia.

Different forms of obedience training also influence the exhibition of unwanted behaviours amongst the domestic dog population. Recently, a study was conducted to determine the prevalence of punishment-based training and its efficacy, in comparison to reward-based training, which has recently become more popular (Hiby et al, 2004). In this survey, 326 dog-owning participants from the general public, in both rural and urban localities in the United Kingdom, completed a questionnaire which was used to determine the relationship between four variables; the demographics of owner and dog, the method used to train a dog for a specific task, dog obedience, and behavioural problems. Training methods were characterised as reward-based, punishment-based, a combination of reward and punishment, and miscellaneous methods.

Results of the study showed that respondents regularly used punishment techniques, with 60.4% using a combination of punishment and reward, and 9.8% using punishment only. It was also found that the frequency of punishment was positively correlated with common behavioural problems including separation anxiety. Conversely, owners reported high obedience scores for dogs trained with reward-only techniques. Although it was demonstrated that in no situation was punishment the most effective training method, it was not known whether owners established reward-based methods in response to dogs that were particularly obedient at an early stage of training, or vice versa (Hiby et al, 2004).

While animal owners and trainers have traditionally used reward or punishment-based techniques to shape behaviour, McKinley and Young (2004) offer a novel alternative to operant conditioning, with a pilot study on the applicability of a modified version of the model-rival method to the training of domestic dogs. The dog is an appropriate subject for such a method, as its origins as a member of large and complex social groups promote observational learning. In the study, nine dogs were trained using operant conditioning and model-rival methods alternately. The operant conditioning training session involved standard food rewards. The model-rival training session comprised an interaction between the trainer, the subject, and a person acting as a model-rival, that is, a model for desired behaviour and a rival for the trainer's attention. In view of the dog, a dialogue concerning a particular toy commenced between the trainer and the model-rival. The trainer praised or scolded the model-rival depending on whether the model-rival had named the toy correctly. The subjects were trialled after each session to compare efficacy of both operant and model-rival techniques in the performance of a retrieval-selection task utilising the toys that had been included in the training sessions. It was found that the performance times for completion of the task were similar for dogs trained with either operant conditioning or the model-rival method. In addition, the total training time required for task completion was comparable for both methods, although it is possible that stimulus enhancement in the model-rival technique played a role in producing these effects (McKinley and Young, 2003).

The experimenters acknowledged that the study was limited by a small sample size and a haphazard variation in dog demographics and rearing history (including previous training in retrieval tasks). Additionally, the primate subject of a previous model-rival study attacked the model-rival, prompting caution in future experiments (McKinley and Young, 2003). However, the removal of extrinsic rewards as used in operant conditioning, such as food or play, encourages the dog to be intrinsically rewarded by the desired behaviour. Furthermore, the model-rival technique may be applicable to the training of household dogs in the future, and could be particularly useful for dogs displaying aggression in the presence of food rewards (McKinley and Young, 2003).

Conclusion

Recent investigations into the effects of different training techniques and environmental factors on dog behaviour reveal that future improvements to the social and physical conditions of dogs may secondarily decrease the probability of unwanted behaviours and accompanying welfare implications.

References

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