

## 2004 APDT Prize Winner

### Canine behavioural problems and their welfare implications

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#### Introduction

Mikkelsen and Lund (1999) found behavioural problems accounted for 23.6% of dogs euthanased in Danish veterinary practices. Similar results have been found from studies in other countries. Euthanasia due to behavioural problems is said to be the largest cause of death in puppies under a year old (Heath, 1992). Problem behaviours significantly decrease a dog's expected lifespan and in doing so, are important welfare considerations. Several recent studies have explored the risk factors associated with these behaviours and possible methods of control.

#### Discussion

In Melbourne, Kobelt et al (2003), telephone surveyed 203 dog owners to examine the relationship between environmental factors and the display of canine behavioural problems. Her 37 questions asked related to demographics, housing, exercise, training, care and the frequency of problem behaviours. No correlation was found between obedience training and behavioural problems. However, a negative correlation was found between obedience to commands and the presence of problem behaviours. The survey showed dogs from households without children, those with the least walks, and dogs whose owners spent little time with them, were more likely to display problem behaviours than other dogs. Also, in support of Jagoe and Serpell (1996), it was found dogs belonging to first-time dog owners showed a higher prevalence of behavioural problems, but this may reflect differences in the understanding of normal canine behaviour between experienced and non-experienced owners. The results of the survey indicate that teaching obedience and increasing the owner-dog interaction are important aspects of canine welfare, as they may reduce the risk of problem behaviours developing. However, these results cannot be applied to all situations, as the survey did not include rural dog owners or unregistered owners. Another limitation is the subjective measurement of the frequency of problem behaviours (a scale of five options from never to always was used), which relies on the owner's opinion. Also, further work must be done to determine whether the risk factors identified are causal.

Kobelt et al's (2003) survey discovered that barking made up 32% of behavioural problems and was the main problem behaviour identified by neighbours of dog owning households. Solutions to excessive barking may be extreme, with surgery and euthanasia as options. Cronin et al (2003) tested a commercial anti-bark muzzle for efficiency over sustained periods of wear, and influence on welfare. In the study, sixteen Australian Kelpies were housed individually in pens with indoor and outdoor components. The dogs were split into pairs that were housed in adjacent pens and one dog of each pair was given the control treatment and the other, the muzzle treatment. Two experiments were conducted, with the dogs undergoing each treatment being swapped before the second experiment. In the first experiment, the muzzle was applied for 42.5 hours and removed only for feeding. The dogs' behaviour to a human stimulating barking was recorded at four different times each day, before, during and after treatment and video cameras kept a continuous record of behaviour. The second experiment followed the same setup but the dogs were treated only for 24 hours and instead of behaviour assessment, saliva samples were collected for cortisol. Results suggested the muzzle was an effective control method as barking significantly decreased with muzzle treatment. Muzzled dogs adopted a submissive behaviour, rubbed and pawed the muzzle for the first 15 minutes of treatment and were less active throughout the duration of treatment than the control dogs, indicating muzzling may result in behaviour modification. However, there were no signs of sustained avoidance of the muzzle and cortisol levels showed no evidence of physiological stress in the muzzled dogs compared to the

unmuzzled dogs, so, welfare may not be a concern. It remains to be seen if prolonged behavioural modification compromises welfare by challenging perception of social status, as muzzled dogs cannot display their teeth they may interpret muzzling as being mouthed by a dominant. Also, and the muzzle must be evaluated on whether it interferes with ability to thermoregulate. An earlier study (Wells, 2001), compared the effectiveness of the citronella collar when used continuously or intermittently to control barking. Results indicated intermittent wear is more effective than continuous wear. This finding is beneficial for owners concerned about long-term use of citronella collars compromising welfare. Perhaps, a similar study should be done on how best to use the anti-bark muzzle in training.

DiGiacomo et al (1998) identified behavioural problems as one of the most common reasons for dogs to be relinquished to adoption shelters. Research in America shows 20% of dogs given to shelters are immediately euthanased and a further 40% are later euthanased. Of the dogs adopted, 20% are returned to the shelter (Haupt et al, 1996). Marston and Bennett (2003), pooled information from various papers to determine the risk factors for relinquishment and how to increase retention of dogs re-homed. They discovered lack of participation in obedience classes and behavioural problems were common risk factors for relinquishment, noted these factors are modifiable and suggested the instigation of behavioural advice telephone helplines through which, owners could have their dogs referred for behavioural assessment or obedience training. They also suggested offering pre-adoption counselling, to help owners select a dog that fits their lifestyle, and also, free dog training in the first month post-adoption to decrease the number of post-adoptive returns. This complementary training could increase the emotional attachment between the owner and their new pet, improve the dog's behaviour and reform the owner's expectations of canine behaviour. If the number of dogs relinquished can be decreased or the retention of those re-housed increased, the meagre financial resources shelters have can be redirected to other welfare issues, such as, environmental enrichment to reduce stress levels and the prevalence of stereotypies. Marston and Bennett have many valid suggestions but before these can be put into use, studies must be done on the effectiveness of these practices and their financial feasibility.

## Conclusion

These studies show a lot can be done to reduce the prevalence of canine behavioural problems and control these behaviours. However, the current information needs refining and the public must be made aware of what they can do to decrease the development of problem behaviours in dogs. Studies on the effectiveness of behavioural clinics would also be useful.

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