

# The Efficacy of Human Interaction and Training in Reducing Stress and Improving Adoption Outcomes for Shelter Dogs

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## Introduction

In Australia, an average of 65,000 dogs are received by animal shelters each year (RSPCA, 2006). These animals are subjected to novel, unpredictable surroundings and social isolation. The welfare of shelter dogs can be adversely affected by these stressors. This paper discusses three recent studies of dog welfare within the shelter environment: the effect of human-dog interaction, the efficacy of behavioural training and factors that contribute to the success of adoption.

## Discussion

Many studies have assessed the effect of human interaction on improving the welfare of shelter dogs, including a recent study by Coppola *et al.* (2006). Thorn *et al.* (2006) investigated the effectiveness and feasibility of implementing basic conditioning programs for dogs surrendered to shelters. Factors affecting the length of stay in shelters were determined by Normando *et al.* (2006).

To measure the effect of human interaction on the stress response of shelter dogs, Coppola *et al.* (2006) implemented a 45-minute contact session on Day 2 after arrival at the shelter. Salivary cortisol concentrations were measured on Days 2, 3, 4 and 9. Thorn *et al.* (2006) conducted three experiments to: determine the speed with which shelter dogs learned to sit; determine whether the training was retained over time in the shelter environment; and examine if sitting is a behaviour that can be transferred to new environments and people. This last experiment is important for assessing the effectiveness of training on adoption success. Normando *et al.* (2006) implemented a Temporary Adoption Program (TAP) to determine factors that influenced adoption. Dogs showing behavioural problems were assigned to a special TAP group (n = 92), while the other dogs were assigned to either the standard TAP (n = 238) or control (n = 293) group.

Results from the study by Coppola *et al.* (2006) demonstrated that on Day 3 after being admitted to the shelter, dogs given human contact had significantly lower salivary cortisol concentrations than dogs with no contact, suggesting that human interaction reduced the stress response. Conversely, no significant differences in cortisol concentrations were recorded on Days 4 and 9. Other studies also indicate that human interaction can reduce behavioural indicators of anxiety in shelter dogs (Hennessy *et al.*, 1998; Hennessy *et al.*, 2002a). When determining the time taken for shelter dogs to learn to sit, Thorn *et al.* (2006) demonstrated that minimal training for 10-15 minutes a day resulted in a decrease in the mean latency to sit and an increase in the total time spent sitting. It was also found that the dogs could retain the skill after a short period without training, and with a new stranger and in a new setting (Thorn *et al.*, 2006). The study by Normando *et al.* (2006) found dogs displaying behavioural problems stayed longer than other subjects in the trial. From these results it can be inferred that by increasing human interaction through training, the prevalence of undesirable behaviours can be reduced, therefore decreasing the length of the dog's stay in the shelter.

Within the shelter environment, there are many psychological stressors that adversely affect the welfare of confined dogs. These include novel surroundings, exposure to intense noise, disruption of familiar routine and separation from attachment figures (Tuber *et al.*, 1999). These dogs also lose control over environmental contingencies because of the unpredictable nature of their surroundings (Hennessy *et al.*, 2002b). Social isolation from humans and conspecifics is considered a major stressor for dogs, which are a highly social species (Hennessy *et al.*, 1998). Coppola *et al.* (2006) highlight the positive effects of interaction with humans in ameliorating

distress caused by confinement, concluding that regular human socialisation prevented sensitisation of the physiological response to unknown situations. Furthermore, by implementing a regular behavioural training program, an element of predictability and routine is introduced and contact with humans is achieved. Normando *et al.* (2006) highlight the potential adverse consequences of irregular human contact by illustrating that dogs with interrupted programs are generally more apathetic and vocal (Normando *et al.*, 2006).

Prolonged residence in a shelter is another welfare issue that needs consideration, as well as a cost to society and an ethical problem (Normando *et al.*, 2006). It is therefore important to reduce the time spent in shelters by increasing adoption rates. Normando *et al.* (2006) suggest improving the perceived desirability of the dogs. Potential adopters react favourably to dogs displaying particular behaviours, such as sitting at the front of the pen (Wells & Hepper, 1992). Dogs exhibiting trained behaviours are viewed positively by visitors (Thorn *et al.*, 2006; Normando *et al.*, 2006), possibly because they may equate training with intelligence in the dog or the perception that these dogs are capable of further training and therefore will make an easier transition to home life. Basic training also appears to decrease the prevalence of undesirable behaviours, such as barking, aggression and stress behaviours, including spinning and pacing (Thorn *et al.*, 2006).

The study by Thorn *et al.* (2006) is limited by the fact that no consideration was given to the challenge of training dogs showing behavioural problems, such as aggression or fear. It may be more difficult to train these animals and demand additional time in each session and decreased intervals between sessions. Coppola *et al.* (2006) also excluded dogs showing behavioural problems from their study. The results concerning the length of stay of dogs showing behavioural problems by Normando *et al.* (2006) could have been biased, as potential adopters underwent an interview process to assess their suitability. The application of training programs in shelters may be thwarted by staff who believe that training is not worthwhile, because of time and funding constraints (Thorn *et al.*, 2006).

## Conclusion

Since human interactions have a positive effect on stress response and the behaviour of a dog in a shelter contributes to public perception of its desirability, applying basic conditioning programs can enhance the welfare of shelter dogs. This can occur by changing the shelter environment and by increasing the chance of adoption success.

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