proved problematic due to the amount of staff time required to carry out the testing, and the number / complexity of measures required. The aim of this study was therefore to identify whether reducing the length and intricacy of the test itself would affect the reliability of the test in predicting the occurrence of SRB, making it more applicable for staff at rehoming centers.

One hundred and forty dogs were assigned to one of three groups, with differing durations of social interaction with a test person ('tester') prior to temporary social isolation. All dogs were habituated to both the tester and test room on the day before testing. Behavior during interaction and separation was recorded. Questionnaires were sent to the new owners 12 weeks after rehoming to identify occurrences of SRB.

Effect sizes from ANOVA of SRB duration in tests and SRB outcome after homing were comparable between groups (eta<sup>2</sup> 0.18, 0.09 and 0.10 respectively), suggesting that minimal interaction prior to temporary isolation retains the validity of the test. Groups were therefore combined to examine specific test elements which were predictive of SRB on rehoming.

Variables were entered into a backward stepwise logistic regression model. The model was statistically significant  $\chi^2 = 31.11$  (5 df, N = 79), p< 0.001 with a specificity of 91% and a sensitivity of 62%. Dogs were 27 times more likely to show signs of SRB on rehoming if they both barked and stood by the exit point for more than 40 seconds (OR = 27.025, p = 0.035). Howling for more than 10 seconds was found to be predictive of SRB (OR = 16.766, p = 0.006) as was scratching the door for more than 10 seconds (OR = 13.351, p = 0.001).

The occurrence of these behaviors on temporary isolation in a pre-familiarised environment is therefore a reliable predictor of the occurrence of SRB after homing, and absence of these signs suggests SRB is unlikely. The results also identify which specific behavioral signs shown by dogs during testing indicate a likelihood of separation problems after homing. The results of this study also suggest that shortening the test does not affect its predictive validity. These findings make the test quicker and simpler to conduct within the rehoming center environment and provide rehoming center staff with a relatively simple practical indicator of risk of SRB in dogs after homing.

**Key words:** dog; separation-related behavior; rehoming centers; temperament testing

# Reference

#### EFFECTIVENESS OF L-THEANINE AND BEHAVIORAL THERAPY IN THE TREATMENT OF NOISE PHOBIAS IN DOGS

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Noise phobia is a profound and extreme fear response to an unexpected, loud and not gradual noise. It is one of the most frequent canine behavioral problems (Overall, 2002; Crowell-Davis et al., 2004; Dreschel et al., 2005).

This study investigated whether the administration of L-theanine (Anxitane<sup>TM</sup>), associated with a behavioral therapy, can attenuate signs of specific noise phobias in dogs (Lu et al., 2004; Kimura et al., 2007).

After the behavioral examination, phobic dogs were divided randomly in two groups. Group A was comprised of 10 phobic dogs that received a standard behavioral therapy associated with administration of Anxitane<sup>TM</sup>. Group B was comprised of 10 phobic dogs that received only a standard behavioral therapy. Blood samples were obtained from all dogs to evaluate cortisol levels before and after therapy. These cortisol values were then compared with cortisol levels of control group (10 dogs without behavioral problems).

Dogs' responses to the audio stimulation were evaluated by the owners using a specific card containing the most frequent phobic signs.

The data were analyzed to evaluate the degree of improvement of dogs with or without the administration of Anxitane<sup>TM</sup>. The Friedman test was used to analyze the variation of behavioral scores during the therapy. Difference in cortisol values were analyzed using the Wilcoxon test.

Both groups A and B showed a statistically significant decrease (P < 0.05) in the total score of behavioral signs during the therapy. These two groups of dogs (group A and B) were considered separately in order to verify any effects of Anxitane<sup>TM</sup>.

Group A showed a significant decreased of panting, lip licking, yawning, attentions seeking, vocalization, compulsive behaviors, compared with group B (P < 0.05). There were no statistically significant differences between any groups with respect to cortisol.

This study suggests that L-theanine can be used as a component in behavioral therapy in the treatment of specific noise phobias in dogs.

**Key words:** dog; noise phobia; L-theanine

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## **EVALUATION OF SHELTERED DANGEROUS DOGS**

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Canine aggression is a very common complaint and carries with it significant consequences for public safety. A dog can be defined "dangerous" when it endangers the physical and/or psychological integrity of humans or other living beings. In Italy, with national law 281/91, the government regulated stray animal management by making it illegal to kill dogs unless they were seriously or incurably ill, or proved dangerous (Dehasse, 2002). Therefore, it is important and necessary to be able to assess the degree of a dog's dangerousness to avoid public safety risks (Bollen and Horowitz, 2008).

This study sought to define an objective method to assess the dangerousness of sheltered dogs. Dogs showing serious problems, like aggression towards people, are much more likely to be returned in shelters (Wells and Hepper, 2000). Until now there have not been parameters to guide veterinarians in the evaluation of a dog's dangerousness and to provide an objective evaluation, based on scientific guidelines, that may lead to euthanasia. The clinician has been able to interpret the law in a too extensive or too restrictive way, resulting in too many or too few euthanasias.

A working group composed of members of the health authority and university specialists have designed an assessment using behavioral and physical parameters (gen-

der, size, age, mandibular thickness, adaptation in the shelter, clinical pathologies that can trigger aggressiveness in dog), in addition to tests to predict a dog's reaction. Among the behavioral parameters, we have considered dog's aggressiveness towards humans (inside and outside the dog's run and during the clinical examination), and reactivity towards other dogs. For each behavioral and physical parameter we chose 3 or 4 ranks associated with a variable score. We also focused on how to create a specific score for dogs with a previous bite history.

This assessment report is now employed at the short term shelter in Milan (Italy). We are testing the majority of the dogs housed in this shelter with this tool.

Key words: canine aggression; dangerous dog; shelter

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#### THE FATE OF CATS ADOPTED FROM RESCUE SHELTERS IN CANADA

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The percentage of animals returned to rescue shelters following adoption is a frequently used measure of adoption success, however, the fate of animals that remain in the community is often overlooked. In response to this issue, this study evaluated the fate of kittens one year after their adoption from shelters in Canada. Subjects were kittens (n = 583) adopted from thirty rescue shelters (members of the Canadian Federation of Humane Societies) between the ages of 2-4 months. When these kittens reached one year of age, their guardians were requested to complete a questionnaire regarding their cat. Some of the guardians (8.7%) were not contactable, either because they had moved or the contact details provided to the shelter were invalid. Of the guardians that were contacted, 67.8% responded to the survey, and of these, 9.8% no longer had their kittens. Of these 35 kittens, 8 had been killed in road traffic accidents, 7 had been returned to the shelter, 4 had gone missing and presumed dead, 4 had been given away, 4 killed by coyotes, 1 killed by a dog, and 7 others died due to illness. When asked whether they were likely to keep their kitten, 85.2% of those guardians who still had their cats reported 'Definitely Yes',