Comparison of SAFER® aggression assessment results in shelter dogs at intake and after a 3-day acclimation

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Abstract:

This prospective cohort study addresses the question of when to perform behavioral assessments on shelter dogs using the ASPCA SAFER® Aggression Assessment Program. The effects of shelter intake and subsequent acclimation on behavioral evaluation results are unknown. The SAFER assessment involves scoring of seven different tests for potential types of aggressive behavior. SAFER testing was performed at two municipal shelters on the day that a dog arrived at the shelter and again after an acclimation period of 3 days. Forty-nine dogs were evaluated on shelter intake. Thirty-three of these dogs were evaluated again after an acclimation period of 3 days. Sixteen dogs assessed at intake were lost to the study due to owner retrieval or euthanasia. Thirty of the 33 follow-up assessments yielded a scoring difference of at least 1 point in at least one of the seven different tests for potential types of aggression. Within the 33 SAFER follow-up assessments, there were 57 tests involving a change from the original score; 31 test results showed a decrease in aggression and 26 tests showed an increase in aggression after 3 days acclimation. Additionally, as dogs are adopted, adopters have been contacted and asked to complete a validated questionnaire (the Canine Behavioral Assessment and Research Questionnaire - C-BARQ) so that the dog's behavior in a home setting can be compared with SAFER test results obtained in the shelter. Further statistical analysis will be performed to compare behavioral assessments at each time point with C-BARQ results, as dogs are adopted. Accurate canine behavior and aggression assessment is a vital part of a successful shelter adoption programs and is necessary to protect shelter staff and adoptive families.

Goals:

Unlike previous studies utilizing a pass/fail approach, where a dog is considered aggressive only following a biting incident, SAFER assessments have the potential to detect more specific forms and triggers of aggression. In a previous study, scores for aggression and anxiety were significantly higher when dogs were tested for the first time in the morning versus a second testing in the afternoon, suggesting desensitization[1]. Another study suggested that behavior assessment scores were unaffected by dog type or environmental variables[2]. A prospective study could shed some light on potential associations between dog age/breed and SAFER test scores and the effect of these variables on timing and the accuracy of assessment.

This prospective prospective cohort study addresses the question of when to perform behavioral assessments on shelter dogs using the ASPCA SAFER Aggression Assessment Program. The effects of shelter intake and subsequent acclimation in the shelter on behavioral evaluation results are unknown. This study aimed to test the

hypothesis that SAFER results will differ at intake and after a 3-day acclimation period. As a secondary aim, where possible, adopters will be contacted approximately one month after adoption and a behavioral history will be obtained, using a validated questionnaire.

Materials and Methods:

SAFER testing was performed at 2 different shelters at intake and again after an acclimation period of 3 days. On intake, dogs over 6 months old were brought into the behavior assessment area, where a SAFER assessment was conducted and DVD recorded. Age, sex, vaccination history, and source (stray or owner relinquished) data was also obtained at the time of scoring. A SAFER-certified evaluator handled the dogs and performed the assessments with a student assistant. DVD recordings of all assessments are currently being reviewed by a second SAFER-certified evaluator masked to previous test scores. Sub-tests involving direct handling of the dog were skipped if the dog froze, showed a hard eye, head flipped, mouthed the assessor with extreme pressure, growled, or attempted to bite the assessor. Adopters of any study dogs are contacted approximately 1 month after adoption and asked to complete a validated questionnaire (the Canine Behavioral Assessment and Research Questionnaire - C-BARQ) designed to provide a standardized evaluation of the dog's temperament and behavior in the home since adoption.

Results:

Thirty-three dogs received SAFER assessments upon intake and following a 3-day acclimation period. Thirty of the 33 dogs showed a change in score in at least one of the 7 SAFER tests when comparing the acclimation assessment to the initial assessment. Of the 30 acclimation assessments showing a change in score, 57 individual tests showed a change in the level of aggression displayed when compared to the initial assessment. Thirty-one individual test results showed a lower score/lower demonstration of aggression after 3 days acclimation, while 26 test results yielded the opposite result. Higher scores in aggression tests involving massaging of the flank, playing a game of tag, and food were recorded during the initial assessment. Higher scores in aggression tests involving eye contact with the dog, and introducing the dog to another dog were recorded after 3 days acclimation. Statistical analyses comparing intake and 3-day SAFER test results, and comparing SAFER test results with C-BARQ results, are ongoing as C-BARQ results become available.

Summary:

Knowing when to assess dogs for potential aggression can enable shelters to manage their time and resources more efficiently and effectively. Accurate behavior assessment is a vital part of a successful shelter adoption program. Additionally, accurate assessment of the potential for aggression in dogs entering shelters is essential to protect shelter staff and adoptive families.

References:

1. van der Borg et al. 2010 *J App An Behav Sci.* 128:78-90.
2. Poulsen et al. 2010. *Vet Med Int.* ID 523781.