



**VETERINARY BEHAVIOR SYMPOSIUM
PROCEEDINGS 2020**

The Impact of Fear Free[®] Practices on Canine Stress During Transportation – a Pilot Study

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This study was funded by Fear Free[®].

Background

Handling dogs with less fear and resistance benefits the dog and the veterinary team. This study's purpose was to determine whether using Fear FreeSM principles during transportation from a shelter to a veterinary teaching hospital would decrease canine stress as measured by salivary cortisol, heart rate (HR), respiratory rate (RR); and fear, anxiety and stress (FAS) scores.

Methods

Shelter dogs (n=16) were randomized into Fear Free (FF) and traditional (T) transport groups. The dogs were driven 100 miles from the shelter to the veterinary teaching center. FF dogs were transported with Adaptil sprayed blankets, toys filled with treat paste, chew toys, and classical music. The dogs were transported in plain kennels, then housed in kennel runs with thrice daily outdoor walks. Salivary cortisol levels, HR, RR, and FAS scores were collected prior to transport, upon arrival at the destination, and 24 hours after arrival. A two-way mixed ANOVA was used for analysis.

Results

There was no significant difference between groups for any of the measures. However, there was a medium effect size ($\eta^2=0.092$) for the impact of group on RR. FF dogs tended to have lower RR immediately after transport and the following day.

Discussion

This pilot study showed no difference between dogs transported traditionally or using Fear Free principles, but suggested that a follow-up study of at least 48 dogs would have shown superiority of the Fear Free method. Smaller dogs did not produce enough saliva for cortisol samples, and should be excluded from subsequent studies if possible.