



Factors Leading to Early Retirement of Guide and Service Dogs

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RESULTS: Researchers use behavioral surveys to identify risk factors for early retirement

Dogs have been used to assist individuals with disabilities for nearly a century. However, statistics show that approximately 20 percent of guide dogs are forced to retire early for a variety of medical and behavioral reasons. Early retirement not only is devastating to owners who depend on guide and service dogs, but may be due to potential health and wellness problems that comes with being a working dog.

Funded by Morris Animal Foundation, a team of behaviorists, veterinarians and support staff at the University of Pennsylvania suspected that stress might play an important role in early retirement, and devised a study to dig deeper into the issue. The team used behavioral questionnaires, as well as measured levels of the stress hormone cortisol in hair samples, to look for factors that could be linked to early retirement. They collected samples from 683 working dogs over a timeframe of about 3 years. The study had a high retention rate among their participants compared to similar studies, with just over 80 percent of dogs and their owners completing the study.

The research group discovered that hair cortisol levels to measure stress were not a good indicator of early retirement. However, the team did identify several environmental factors, as well as behavioral traits of both dogs and owners that were meaningful. These findings were:

- Unpredictable environmental factors, such as attacks by other dogs, greatly increased the likelihood of guide/assistance dogs retiring early for behavioral reasons.
- Dog behavioral traits such as distractibility, fearfulness, touch sensitivity, excitability, oral behavior and attachment (as measured in surveys) were linked to owners' working relationships with their dogs and, in the case of distractibility and some compulsive behaviors, also predicted early retirement.
- Dogs allowed to interact with other people while in harness/on duty, and those that engaged more in active play with other people while out of harness/off duty, were less likely to retire early for behavioral reasons.
- Owners with positive personality traits, such as agreeableness, conscientiousness, emotional stability and openness to new experiences, reported better working relationships with their dogs.

The researchers collected a wealth of data on the study population of working dogs that they felt could not only inform other studies, but also guide future research projects in this critically important population of dogs. The ability to predict which dogs would likely retire early is a valuable screening tool for trainers and owners, and may help flag dogs early whose health and mental wellbeing could be negatively impacted through this type of work