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Behavioral Assessment/Temperament Testing

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The Purpose of Testing

The purpose of assessing dogs in a shelter setting is to:

1. Determine 'adoptability'
2. Determine whether the dog is a public safety risk
3. Determine whether something can be done to improve adoptability

Definitions

Temperament- In medieval physiology: the combination of the four cardinal humours of the body, by the relative proportion of which the physical and mental constitution were held to be determined; The combination of supposed qualities in a certain proportion, determining the nature of a plant or other body; Characteristic nature; Constitution or habit of mind, esp. As depending upon or connected with physical constitution; Natural disposition.

Behavior (n.) The manner in which a thing acts under specified conditions or circumstances, or in relation to other things.

Personality (n.) The set of fairly consistent, organized, or patterned qualities, traits and behaviors responsible for our individual uniqueness. Features and characteristics such as mental abilities, aptitudes, temperament, and attitudes that make us who we are.

Adoptability

- Temperament/Behavior
- Will someone choose to adopt this dog in this shelter?
- How many other dogs of this size/breed/age are currently available for adoption, and how long have they been there?
- Does this dog have any behavioral problems that decrease its adoptability?
- How will this dog respond to stress/life in the shelter?
- Is there any way to improve this dog's adoptability?

Behavior and Temperament

Dogs reach social maturity at 2-3 years of age, their ‘personality’ is not fully developed until then. And even so, Behavior/Temperament is influenced by experience AND genetics.

Stress and Behavior Assessment

In a shelter or test situation, personality characteristics such as sociability, anxiety, trust, and ‘trainability’ may be falsely increased or decreased due to elevated stress levels. Depending on your skills as an evaluator, you may misinterpret behavior. Stress may reveal ‘bad’ aspects of personality/temperament which is valuable information, BUT does not allow expression of true temperament.

Dog Communication and Body Language

Dogs communicate with each other (and us) with body language. They also communicate via vocalizations and scent marking. In order to accurately assess dogs, it is important to know how to assess dog body language. It is critical to understand how to assess a stressed or aggressive dog, in order to keep yourself safe.

Public Safety

Dogs are....dogs. When a human does not understand when a dog is telling them (in body language) that they are conflicted/anxious, they MAY escalate their behavior. Dogs learn very quickly from previous experiences. They can learn that biting is a very effective means to resolve a stressful situation. Aggression is one of the leading behavioral causes of relinquishment to shelters, and therefore must be seriously evaluated before a dog is placed for adoption.

A shelter or humane society is ‘responsible’ for the dogs it adopts out to the public. Therefore, shelters must thoroughly review the conditions (if available- dog’s history, detailed information about the bite incident, and severity of the bite) when deciding whether to put a dog (with a bite history) up for adoption. Many shelters will not place a dog up for adoption if it has bitten someone.

Because much of the aforementioned information is often not available in our shelters, behavioral assessment is a very important tool in assessing the adoption candidate’s aggressive tendencies.

Behavioral Assessment Tests

ATTS (www.atts.org)

Puppy Aptitude Test (www.volhard.com)

SAFER test (Emily Weiss)

Sue Sternberg’s test

Guide Dog and Working Dog tests

Behavioral Assessment Research

There are a number of behavioral assessment studies... primarily of working dogs, but some shelter dogs. Working dog tests primarily test via stressful challenges. Shelter dog tests primarily attempt to assess factors that will be 'challenged' regularly at home. Several tests have many years of practical application, refinements. Unfortunately, there is little to no data available to back up validity of tests.

Test Reliability

Reliability- the extent to which a measurement is repeatable and consistent

Intra-rater reliability- reliability of the same tester, repeatedly

Inter-rater reliability- reliability among different testers

Test Validity

Validity- Does the test measure factors that the tester wishes to assess, and provide information relevant to the questions being asked? Therefore, in order to validate a behavioral assessment test, one needs to prove that the test predicts successful adoption, and/or accurately predicts problem behavior in the home. A test can be reliable (same rating every time), but not valid (not predictive of behavior in home), or it can be valid/accurate (for one tester), but not reliable among testers

Desired Working Dog Qualities

Courage

Sharpness

Hardness

Reaction to gunfire

Nerve stability

High energy level

Desired Shelter Dog Qualities

Sociability

Low to medium energy level

Low aggression

Good behavior with dogs, children

Sue Sternberg's Test

- Sociability
- Dominance
- Hug
- Play
- Prey drive
- Food bowl aggression
- Possession aggression
- Mental Sensitivity
- Stranger aggression
- Child aggression
- Dog aggression

SAFER test

- Stare test
- Sensitivity test
- Tag test
- Pinch test
- Food aggression
- Dog-dog aggression

Problems with Behavioral Assessment Tests

- Potential lack of intra-rater and inter-rater reliability
- Lack of clear definitions for the parameters you are testing
- Stress reduces accuracy/validity of results
- Inconsistent environmental conditions
- Lack of published research (on multiple animals, with long-term follow-up in a home) to validate test results
- The test is an assessment at a point in time, you could potentially miss valuable information
- Unknown predictive value of ‘failed’ tests
- Testing takes TIME
- Some tests are dangerous for the tester

The Value of Testing....

- Provides information to assist in adoptability assessment
- Assess potential public health risk
- Identifies qualities to match pet to ideal home (energy level, not good with dogs, etc)
- Identify ‘problem’ characteristics
- Provides information that will help us to better understand dogs

Goals for Assessment

Behavioral assessment techniques should be used scientifically (in order to gain valid information over time) and in conjunction with surrendering owner information, information from kennel staff, volunteers, etc., in order to achieve the most thorough assessment possible.

Additional information....

Behavioral testing of dogs in animal shelters to predict problem behavior

Van der Borg, et al, 1991, Applied Animal Behavior Science

Developed a test to assess problem-related behavioral characteristics

Focused on aggression, fear, obedience, separation anxiety (key presumed factors for relinquishment)

The dogs were tested and staff gave opinions re: dog’s behavior—they compared these results to experiences of new adopters. Testing + staff opinions predicted 75% of problem behaviors. Results showed a very high predictive value for: separation anxiety, excessive barking, and jumping on people. It showed a high predictive value for: pulling on leash, aggression toward adults, disobedience, and aggression toward dogs/cats. But...the test took 1.5 hours to complete, not very practical for most shelters...

Behavior and cortisol levels of dogs in shelters—predictive of problem behavior after adoption?

Michael Hennessy, et al, 2001, Applied Animal Behavioral Science

This study looked at behavior and cortisol levels of dogs in a public animal shelter, and an exploration of the ability of these measures to predict problem behavior after adoption. They developed a test to assess puppy/dog response to novel/threatening situations, as part of a study to assess effects of stress in shelters. The test took ten minutes to administer, and six factors were identified (locomotor activity, flight, sociability, timidity, solicitation, wariness). Behavioral questionnaires were sent to owners 2 weeks and 6 months post adoption. Unfortunately there was only a weak association between this test and behavior in a home.

Plasma cortisol levels at a county animal shelter

Hennessy, 1996, Physiology and Behavior

This study addressed the idea of WHEN is the best time to perform a test. This project looked at blood cortisol levels over time.

Cortisol levels showed no significant reduction until day 4, and remained high until day 10. This was done at one shelter, results could be different elsewhere. However, this study does show that cortisol and stress levels will vary over time. Many shelters don't have the luxury of waiting 10 days to assess behavior. I recommend (if possible) testing dogs at 4-5 days, then again at 2 weeks. If the results are the same, it is likely OK to test at 4-5 days.

The Maddie's Shelter Medicine Program at the University of California, Davis, School of Veterinary Medicine advances shelter medicine as a veterinary specialty through research, specialty training and education, and performance of veterinary services in animal shelters: and help improve the quality of life of animals in shelters through improvements in veterinary medicine and management of disease.