

IT'S NOT "JUST SEMANTICS"

WORDS DO MATTER. Can we be reasonably

confident that the way the dog behaves on a "test" reflects how the dog will behave in the future?

What does it mean when we say we are "temperament testing" a dog? What are we really doing? The commonly held belief is that we are revealing the dog's underlying temperament, some pervasive set of characteristics that influences behavior. But are we really getting at temperament or are we simply observing behavior? Some prefer to call the test a "behavior evaluation," viewing the test as an indication of

how the dog responds when presented with a particular set of stimuli.

What is the difference, if any, between temperament and behavior? Is it just an arbitrary choice of words – is it "just semantics?" Let's look closer at the scientific distinction between temperament and behavior.

TEMPERAMENT OR BEHAVIOR?

Behavior is considered to be an expression of temperament. But temperament is more than just behavior. It is presumed to be like "personality." the product of both raw genetic material and environmental influences. Concepts of temperament and personality are based on the view that there are behavioral styles, enduring dispositions that lead to behavioral constancy over time. To measure personality in humans, researchers examine behavior in a wide variety of circumstances and then look for statistical relationships among the responses. Behaviors that are linked are assumed to reflect an underlying "trait" that leads to similar responses across time and situations. For instance, think of a trait termed "sociability," with an out-going person described as extroverted. This might mean that, in a variety of social situations, an extroverted person is more likely to engage in interactions with both familiar and unfamiliar people. A few studies have taken the same approach with dogs. Recently, Svartberg and Forkman (2002) put dogs through a battery of tests and identified five specific and independent traits: playfulness, curiosity/fearlessness, chase proneness, sociability, and aggressiveness. They also describe a higher-order continuum they call shyness-boldness. Bear in mind that the findings of such studies are limited by the behavioral tests used and by the dogs tested, as well as statistical decisions about what constitutes a "trait." It is only with studies like this, however, that we can make statements about dog temperament. We can't just jump to conclusions, based on intuition, that certain behavioral responses indicate an underlying trait.

To add even more complexity to this discussion, some traits in people are considered more stable than others. Information about the consistency of a trait is critical if you hope to predict future behavior based on a single observation, like a behavioral test. Furthermore, it appears there are

"Behavior is considered to be an expression of temperament. But temperament is more than just behavior."

individual differences in overall behavioral stability. Some people behave in a very consistent manner and their future behavior is relatively easy to predict from a small set of observations. Other people are much less stable and it takes a greater number of observations to even begin to get a handle on predicting their future behavior. Martinek et al. (1975) found evidence of individual differences in consistency in dogs. They determined that dogs scoring as extreme on a particular trait were more consistent in their behavior than dogs scoring as moderate. Similar results are found for children:

“Can we be reasonably confident that the way the dog behaves on a ‘test’ reflects how the dog will behave in the future?”

extremely shy and extremely bold kids behave very consistently across various social situations, whereas moderately shy kids are more erratic in their social behavior, depending upon the circumstances. Svartberg et al. (2005) examined the consistency of the five personality traits they identified in dogs by testing the same set of dogs three different times in three different locations, each test separated by about 30-35 days. They found that playfulness, sociability, and chase-proneness were all highly consistent, whereas curiosity/fearlessness tended to increase and aggressiveness decreased across testings.

So here’s the essence of the problem we face. We have an unknown dog, in rescue for example, and we want to learn as much as we can about the dog as quickly as possible so we can determine if the dog is adoptable and, if so, to match it with an appropriate family. Can we be reasonably confident that the way the dog behaves on a “test” reflects how the dog will behave in the future? Let’s consider an example of human behavior. Suppose we wanted to assess “assertiveness” in people and we decide to do this by observing people’s responses to having someone cut in front of them in line. I’m sure

this has happened to you before. There are certain people who would never dream of saying anything to the pushy individual no matter what the circumstances. There are also people who couldn’t let it go and would always say something. These people are very consistent in their response to this “test” of assertiveness. But then there’s the majority: people who vary along a continuum of assertiveness, not at either extreme. Sometimes we stand up for ourselves and sometimes we don’t. Suppose we are testing an individual who truly is fairly unassertive but on the day of our test, gets into a screaming

match and swears at the person cutting in line! Maybe the person we are testing got pushed around by his boss all day at work and was at his limit when the person cut in line. Maybe the person we are testing had come from having a drink at the bar and he

was less inhibited at the time of the test. Maybe the person we are testing was already late for an important appointment and desperately needed to get to the front of the line as quickly as possible. Certainly you can recognize that observing the person on this particular day with this particular test of assertiveness would give you a distorted view of the person’s real nature.

Imagine instead that we are observing an individual who would normally score reasonably high on an assertiveness scale. But on the day of our test, it is a small child or an elderly woman who cuts in front of him and he chooses to refrain from saying anything. Or the person we are testing has just come from having an hour-long massage and is “gelling” so he doesn’t care if he has to stand there all day. Or maybe the person we are watching is with his mother and he refrains from saying anything so as not to embarrass his mom. Or maybe the person being tested is in a foreign country and doesn’t say anything in response to being cut off solely because he doesn’t speak the native language. I recall being reluctant to ask for directions the first day or two in London, England because I was worried that I wouldn’t understand the accent!

In this apparently reasonable test of assertiveness, you see how a significant detail can change the situation so dramatically that the person's behavior is not at all representative of his overall style of responding. How do we know the same is not true when we evaluate a dog based on one evaluation on one particular day? We don't know all the internal and external factors that may be impinging on the dog and influencing its behavior at the time of the test. In fact, we don't even know how the *previous tests* impact the dog's behavior on subsequent tests. So, until we know a whole lot more about the relationship between behavior and temperament in dogs and about the tests we use, I feel that we should be conservative in our claims and choose our words carefully: *we are evaluating behavior, not testing temperament.*

CHANGING BEHAVIOR

At a conference on shelter dogs, the audience seemed to have a great deal of trouble with the concept of successfully rehabilitating dogs that displayed problem behaviors during the evaluation. The test revealed dogs that responded timidly with strangers, backed away from an approaching woman brandishing a cane, or aggressed toward an interfering person while chewing a bone. It became clear to me that *the basis for this skepticism was nothing more than the belief that such behaviors are indicative of temperament and therefore, inherently unmalleable.* Remember that earlier we defined temperament as the product of *both* raw genetic material and environmental influences. If that doesn't sit well with you, consider another example of human behavior. I happen to be what most people would label an introvert. In human personality tests, boldness/shyness is considered a behavioral trait. My best guess is that I am genetically predisposed to shyness. I am of Scottish lineage and Scots tend to be hardy people of few words. In addition to the presumed genetic basis, I was also under socialized as a child. No one would describe my parents as conversationalists. Family get-togethers are

characterized by yes-no type questions and lapses of silence. They dread a significant anniversary because they despise parties that feature them as the centers of attention. So my early experiences did nothing to counteract any genetic tendency I might have toward shyness. Shyness influences my behavior in a variety of circumstances. As a child, I used to hide behind my mom whenever anyone I didn't know spoke to me. In school, I never joined drama or debate club.

In university, I never raised my hand to ask or answer a question. I never volunteered to go up to the front of the classroom. I would always opt

“We don't know all the internal and external factors that may be impinging on the dog and influencing its behavior at the time of the test.”

to write a paper rather than give a presentation. In fact, as an undergraduate, I used to select my courses by first reading the syllabus and rejecting any that required an oral presentation. Never in a million years would I sign up for public speaking. One might be tempted to argue that I wasn't able to do these things; that my genes and early experience dictated I behave this way. However, my life took an interesting turn.

Once I got into graduate school, I could no longer avoid giving oral presentations. I was always terrified, I performed dismally, but I had no choice. I got a bit more comfortable and more proficient as I practiced this new behavior that was so out of keeping with my “temperament.” In fact, during my final year, I won an Honourable Mention at a prestigious competition in which I had to present my dissertation research. But, despite all that practice, I would still rather have eaten nails than get up on a stage in front of a group of people! Once I graduated and followed a career path as an applied

animal behaviorist, I made two discoveries. The first is that I desperately wanted to share my knowledge of animal behavior and learning with other trainers. I was so passionate about it that I wrote a book. But of course, the written work wasn't enough—people wanted to hear it explained. So I was motivated to give lectures. The second discovery I made was that giving lectures and seminars are financially rewarding. So money was another motivation for taking on public speaking. I studied talented speakers, I read books, I practiced in front of small groups of people, and I worked with a coach. Gradually my skills improved. I still have plenty of room for improvement but I no longer read from my notes, I no longer fill my sentences with “urn” and “ah,” and I can even venture out from behind the podium on occasion! More surprising is that I now genuinely enjoy public speaking. At a conference, I can't wait until it's my turn to get up there and share my stories. Am I no longer an introvert? Of course I still am. That will never change. I still can't make small talk with people I don't know and I'm still a wallflower at parties. But one component of my behavior changed because I was motivated to learn new ways of behaving. If you attempted to rate me on a scale of boldness/shyness from one observation of me lecturing to a large group of people, you likely would arrive at an erroneous conclusion about my sociability.

So now consider how this relates to a dog in the shelter. Suppose you run a dog through a behavior evaluation and you determine that he is asocial, presumably a temperament trait, although you'd need to demonstrate this tendency across both situations and time in order to be fairly confident that this is a stable behavioral pattern. A number of behaviors might suggest asociality. The dog stays at the back of his kennel when you approach. He prefers to explore the room rather than interact with you. He backs away and growls when you reach for him. He becomes rigid when you handle him. He barks and growls when someone approaches him in a threatening manner. Once the dog gets to know a person, he is friendly. Like my shyness,

this dog's asociality probably has a genetic basis. That, combined with poor socialization or unpleasant experiences with people, could set the dog up to generally mistrust strangers. Could this dog learn new behavior patterns that are counter to this general tendency? Suppose you provide this dog with plenty of motivation to interact with new people and give him opportunity after opportunity to practice new social skills? Why would this dog be any different than me learning to give public lectures? He could learn to sit and touch his nose to the outstretched hand of a stranger; he could learn to approach and accept treats from intimidating people; he could learn to enjoy being touched. Would he become a social butterfly? Not likely. He'd probably still be reticent in certain situations, and in a really terrifying predicament, I bet he'd revert back to his old ways, but if he learns to cope with most of the things faced by the average pet dog, he could make a fine companion.

How long would it take to rehabilitate a dog like this? We find that dogs in our shelter often show significant improvement after as few as 20-25 behavior modification sessions. Some require fewer sessions, others demand far more. In the older psychological literature, I found reports of children requiring one to two sessions per day for two months to extinguish a fear of snakes or frogs. With the advent of anti-anxiety medication and health maintenance organizations (HMOs), behavior therapy for people with fears now averages between eight to twenty sessions. A person with anger management problems can learn to control rage in a more normal fashion in as little as eight to ten weeks. Snake-phobic adults can learn to handle a live snake in as few as one session a week for six weeks. Does it take longer to eliminate problems that have a strong genetic basis? There is plenty of evidence that people are predisposed to certain types of fears, such as fear of snakes, spiders, and heights. This makes sense from an adaptive perspective, as these are truly dangerous things. But people also develop fears that don't seem to have an evolutionary history. We fear being in enclosed

spaces, being in large spaces, public speaking, meeting new people, and so forth. You'd think that it would be much harder for people to master a genetically predisposed fear, wouldn't you? Well, that's not the case. Indeed, it takes about the same

“We need to acknowledge the limitations of the behavior evaluation and take it for what it is.”

number of therapeutic sessions for a person to overcome a fear of flying as it does to overcome a fear of speaking to strangers. So if we take the leap and extrapolate to dogs, it really shouldn't matter whether we're trying to change behavior that we suspect is linked to “temperament” or not. And devoting 20-25 sessions to teach a dog to enjoy having its body handled or to appreciate people interfering during a good chew on a bone is pretty reasonable.

CONCLUSIONS

In summary, there are many unknowns when it comes to dealing with dogs in the shelter environment. We need to acknowledge the limitations of the behavior evaluation and take it for what it is. It is merely a snapshot of behavior at one point in time. It may give you highly valid information that reliably predicts the future behavior of the dog or it may not. Many other factors may come into play. We know that repeated testing or multiple observations across a variety of situations is more likely to provide an accurate reflection of the dog, at least with regard to more stable traits like sociability and playfulness. Fearfulness and aggression appear to

be somewhat less consistent over time. So words do matter, because we cannot be sure that when we see a dog behaving in a particular manner on a test that we are identifying its temperament. It is far more appropriate to talk about “behavior evaluations” so we don't imply more than we actually know.

And we need to open our minds when it comes to the rehabilitation of shelter dogs. Again, words matter. Just because we are labeling a dog with words like “fearful,” “aggressive,” or “asocial,” doesn't mean that behavior can't be changed. We know that even highly adaptive, predisposed behavior is amenable to change. The individual is the biggest contributor to whether rehabilitation will succeed. Some dogs will be very resistant to treatment, just like some people, but others will be highly receptive. And, if you do attempt to rehabilitate a dog, acknowledge that nothing happens overnight. It takes time and effort. If you happen to work in a shelter that has the resources to work with problem dogs, recognize that one to two months of work is realistic. If you can't significantly improve the dog in that amount of time, it may not be worth the effort to continue, as other dogs could be benefiting from those resources. This is a judgment call that should be based on the mission of each organization. It is a question of weighing the needs of the many against the needs of the few. There are no right or wrong answers, merely choices that need to be made. But, please, base these choices on sound scientific knowledge, not opinion and intuition. Attend to your words; semantics often have unintended implications.

First printed in the Association of Pet Dog Trainers “Chronicle of the Dog”, Vol XIII, No. 6

Dr. Reid is a certified applied animal behaviorist and dog trainer. Since 1991, she has held the post of Vice President of the ASPCA Animal Behavior Center where she works on projects designed to improve the well-being of pets and their people.

*She is a well-known lecturer on animal behavior learning theory, and agility training. In addition to many scholarly works (including chapters in *Readings in Companion Animal Behavior, Shelter Medicine for Veterinarians and Staff, Mental Health and Well-Being in Animals, and Behavioural Biology of Dogs*), she authored the acclaimed book *Excel-erated Learning! Explaining (in Plain English) How Dogs Learn and How Best to Teach Them*.*



Pamela J. Reid, PhD.

REFERENCES

- Martinek, Z., Lat, J., Sommerova, R. & Hard, K. (1975). About the possibility of predicting the performance of adult guard dogs from early behaviour: II. *Activas Nervosa Superior (Praha)*, 17, 76-77.
- Svartberg, K. & Forkman, B. (2002). Personality traits in the domestic dog (*Canis familiaris*). *Applied Animal Behaviour Science*, 79, 133-155.
- Svartberg, K., Tapper, I., Temrin, H., Radesdter, T. & Thorman, S. (2005). Consistency of personality traits in dogs. *Animal Behaviour*, 69, 283-291.