

THE BEHAVIORAL ASSESSMENT OF DOG AGGRESSION

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The purpose of a behavioral assessment is to help determine:

1. the degree of socialization of the dog to people,
2. the preparedness of the dog to behave in an aggressive manner in different motivational contexts, and
3. the ability of the dog to restrain or inhibit aggressive behavior in the presence of people.

A "FAIR" assessment is designed to answer the questions above, not "to PROVE that" the dog was or wasn't aggressive.

The assessment of a dog's aggressive behavior is made with the alleged attack in mind:

1. If only one dog was involved in the attack, the dog should be isolated in the kennel run during the assessment; if more than one dog was involved in the attack, the dogs should be placed in adjoining runs during the assessment (or in some cases, together; see Wright & Lockwood, 1987).
2. The stimulus person(s) should be as similar as possible to the victim or share at least some characteristics of the victim. For example, if the victim was a male stranger, the stimulus person should be a male stranger.
3. A "stand-in" (or a doll, manikin, etc) for the victim, one dressed as similar as possible to the actual victim, should be used in one stimulus presentation.

The assessment is based on a COMBINATION of behaviors the dog exhibits and directs toward the stimulus persons (stranger) and objects (umbrella, doll dressed like the victim) in a series of "stimulus presentations"* or "assessment procedures."* For each stimulus presentation, the dog's behavior is rated on a combination of:

1. signs and signals it displays (ears, tail, facial features, posture, piloerection, vocalization),
2. behavioral components it exhibits (approach - withdrawal, lunging, snapping, baring teeth, biting), and
3. degree of arousal it exhibits during the stimulus presentations, and in the interval between each stimulus presentation.

All behavioral assessments must include two or more "comparison dogs" that are as similar as possible to the target dog, and that have been kept in the kennel facility for approximately the same amount of time as the target dog. If possible, the stimulus person(s) should not be aware which dog is

the "target" dog. All stimulus presentations should be done fairly and equally to each dog that is assessed (target and comparison dogs).

*(one should refer "presentations" or "procedures" rather than to "tests" -- "tests" have validity and reliability coefficients established for the population (eg, type of dogs) tested; no "aggression test" or "placement test" to-date have validity and reliability coefficients that indicate "how good" the test is at doing what the test is supposed to do.

LIST OF COMMUNICATIVE AND BEHAVIORAL COMPONENTS

AGGRESSIVE

(overly assertive)

ears rotated forward
 tail up ("flagging")
 direct eye contact (stare)
 visual tracking
 body oriented toward target
 bare teeth, snarl,
 bark, growl, lunge, bite
 puckered lips
 intense, long duration arousal
 piloerection
 lack of investigation of
 stimulus person/object
 heightened muscle tension
 (body stiff)

standing - weight forward
 excessive reactivity to
 stimulus person/object
 lack of self-control lack of
 inhibition to stimulus
 person/object

NON-AGGRESSIVE

(or submissive)

ears neutral or back
 tail relaxed, down ("wagging")
 look-away, avoids eye contact

body oriented away from target
 submissive grin, smile face,
 yawn (conflict),
 licks lips (conflict)
 lack of arousal, or short
 duration arousal
 investigates stimulus person
 or object
 relaxed muscle tone
 exaggerated or increased
 submissive behavior to
 prolonged stimulation from
 stimulus person/object
 sitting posture or lying down
 relatively unreactive to
 stimulus person/object
 quick recovery following
 stimulation, shows self-
 control, shows inhibition to
 stimulus person/object

DEFENSIVE AGGRESSIVE

exaggerated submission (tail tucked, ears flattened back, body oriented away, approach- withdrawal); more defensive when stimulated/aroused; may lunge, growl, bite to continued stimulation; may maintain "indirect" eye contact (looks at you sideways, or establishes stare, but other components indicate fear); heightened muscle tension, piloerection, pupillary dilation approach/avoidance behavior, or maintains distance from person/object.

**BEHAVIORAL TESTING OF A DOG IMPLICATED IN AN ATTACK
ON A POLICE OFFICER**

From: J. C. Wright, Psychology, Mercer University, Macon, GA, and P. L. Borchelt, Animal Behavior Consultants, Inc. 2465 Stuart St., Brooklyn, NY

We evaluated the behavior of three mixed-breed pit bull dogs at a kennel facility. One dog, "Killer", a brown and white 1 year old, intact male, was alleged to have lunged at and attempted to bite a police officer and to have threatened several animal control officers. The other two dogs had been housed in a shelter environment, and served as comparison dogs. "Bruce" was a 1 1/2 year old, brown and white, reproductively intact male that was brought into the animal control facility 3 days prior to testing. "Wags" was a 4 year old brown and white, neutered male that had been kept at the kennel facility for 3 1/2 years. The purpose of this evaluation was to attempt to determine 1), the degree of the socialization of these animals to people unknown to them; 2), the extent of any predisposition to behave in an aggressive fashion in different motivational contexts, and 3), the ability of these animals to restrain aggressive behavior in the presence of people.

The dogs were initially tested individually, in separate cages, in an area isolated from other animals and other disturbances. The following procedures were performed:

1. evaluation of response to friendly approach, play solicitation, and then mild threat from a stranger.
2. response to food offered by a stranger in a friendly way.
3. response to novel stimuli, including a visual stimulus (an umbrella opening slowly, then quickly), an auditory stimulus (an ultrasonic dog repellent) and a fur piece.
4. response to agitation by a stranger moving forward, threatening, and rapidly backing away.
5. response to a life-size manikin dressed in a blue uniform, wearing a policeman's cap.

In addition, "Killer" and "Wags" were observed together in adjacent cages in which they could see and smell each other, as tests 1, and a combination of tests 4 and 5 were repeated.

RESULTS

Individual tests

"Bruce": This dog responded to the unfamiliar person's slow, friendly greeting by approaching the person, sitting, and sniffing at the person's hand, in a friendly manner. A direct stare and stern voice by the person elicited a slight withdrawal response and avoidance of eye contact, whining, and sitting in a submissive manner. The dog accepted the beef jerky readily in the food test, and at one point attempted to play with the food. He responded to 5 discharges of an ultrasonic dog repellent by withdrawing from the front of the pen, wagging his tail, and sitting down. Bruce initially leaned forward to investigate the umbrella, but cringed, backed away from, and sat down when the umbrella was opened several times. Agitation elicited submissive sitting; a fur piece was investigated briefly by sniffing, and Bruce was merely attentive to the manikin, wagging his tail, and remaining in a submissive sitting position most of the time.

"Killer": This dog responded to the slow, friendly approach with more hesitation than "Bruce" and less friendly behavior, although there was some sniffing directed toward the person and an absence of aggression. He growled to eye contact and a harsh voice. Killer stared back at the person in a threatening manner, growled, barked and slightly lunged toward the person in three successive instances. He somewhat hesitatingly took food from a friendly person, but did not eat it, and growled intermittently at the person. Killer initially growled at the person approaching with the sonic dog repellent, but retreated and cringed after it was discharged. He was very reactive to the sound, and continued to growl at the person from the back of the pen. Killer, now at the front of the pen, growled initially at the person approaching with the umbrella, and stared intensely while getting into a lunge stance. He showed his teeth, growled and lunged at the umbrella when it was opened slowly, as well as quickly. To agitation, he growled and bared his teeth, again "standing his ground". He showed his teeth, stared, growled, snapped, lunged and barked at the person as the person approached and then retreated from Killer. He did not approach to investigate the fur but retreated to the back of the pen, growling intermittently. His response to the manikin was to stare, bark, and growl in a lunge stance, but it was not more intense than to the person. It was notable that the barking and growling continued for up to a minute after the person left.

"Wags": This dog responded to the slow, friendly approach with some hesitation, although he did approach with some tail wagging and other submissive behavior. He briefly established eye contact to the person's direct stare, but looked away and remained non-aggressive for the remainder for the first session. Wags took food readily, approached the person with no signs of hesitancy and wagged his tail submissively during the food test. He initially sniffed toward the sonic dog repellent and wagged his tail, but startled and withdrew to the sound of the ultrasonic device. After the fourth and fifth discharge, he wagged his tail in a tucked fearful posture and remained at the back of the pen. He immediately approached the front of the pen with a "smile face" as the person walked away. Wags cringed and growled in response to the umbrella opening fast, but only cringed and walked to the back of the pen to the initial two slow openings. While still lying at back of pen, Wags kept track of the agitator, and briefly wagged his tail. As the agitation increased, Wags remained at the rear of the pen, whined, and showed no signs of aggression in response to the fur piece. The manikin produced a few barks and mild growls, yet Wags remained at the rear of the pen, and lay down as the manikin was removed.

Group test:

Immediately after completing the individual tests, we placed "Killer" in the run adjacent to "Wags" and left them there for about an hour. There was no evidence from either dog of growling, barking or lunging at the fence toward the other. They sniffed and then ignored each other. We then repeated some of the tests to see if either dog would escalate its level of aggression in the presence of another dog. There was some evidence of social facilitation from "Wags" in that he was a bit more aggressive than before, but he settled quickly compared to Killer when the tests were completed.

CONCLUSIONS

There was no evidence of aggressive behavior from "Bruce." He appeared to be a friendly dog that did not become aggressive to threats or startling sounds or movements of strangers.

There was some evidence of defensive aggressive behavior from "Wags." He barked and growled to frightening or threatening sounds or movements of people. His aggression, however, was accompanied by withdrawal. He did not lunge forward towards the source of stimulation.

There was evidence of aggressive behavior from "Killer." He growled, bared his teeth, snapped at and approached the source of various visual stimuli. The approach component of his aggression is the feature that is dangerous. He also did not reduce his level of aggression quickly once the source had disappeared; he typically continued to growl for a while after the unfamiliar person, or other visual stimulus was removed.

It is our judgment that "Killer" displayed behavior compatible with the descriptions offered by the investigating police officer and the animal control officers. The approach, lunging component of his aggressive behavior is particularly dangerous in situations where he is off leash and not controllable. It is likely that the type of aggression displayed by "Killer" involves protective aggression. This means that he would be more likely to become aggressive in the context of protecting the owner or the owner's property (where he is most familiar - his territory). Thus, he would be even more aggressive if the owner were walking him, on or off the leash, or if someone walked onto the owner's property. We believe that "Killer" poses a danger to the community. It is not recommended that he be confined on a leash on his property because such a situation may actually escalate the danger. A continued history of barking, growling and lunging at people will increase the likelihood of a serious bite if "Killer" were to get off the leash or if a person were to otherwise inadvertently get too close to him. Although Killer's response to friendly people, especially those familiar to him, is relatively nonaggressive, he does not demonstrate the kind of restraint of aggressive behavior in the presence of people necessary to make him a safe pet in the community.