

Measuring Behavior & Temperament in Dogs
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Research on canine temperament has been hampered by a shortage of reliable and valid methods for measuring behavior in the normal dog population. This paper describes the development and application of a new questionnaire method (Canine Behavioral Assessment and Research Questionnaire--C-BARQ) to a national survey of temperament in a sample of over 1500 dogs belonging to 11 common breeds (Basset Hound, Dachshund, English Springer Spaniel, Golden Retriever, Labrador Retriever, Poodle, Rottweiler, Shetland Sheepdog, Siberian Husky, West Highland White Terrier, and Yorkshire Terrier).

The C-BARQ is currently the only existing behavioral assessment instrument of its kind to be thoroughly tested for reliability and validity on a large, representative sample of dogs. This testing process has allowed the identification of eleven distinct temperament traits or factors that are common to the majority of dogs, regardless of breed, age, sex or neuter status:

1. Stranger-directed aggression: Dog behaves threateningly or aggressively to strangers approaching or invading the dog's or owner's personal space, territory, or home range.
2. Owner-directed aggression: Dog behaves threateningly or aggressively to the owner or other members of the household when challenged, manhandled, stared at, stepped over, or when approached while in possession of food or objects.
3. Stranger-directed fear: Dog behaves fearfully or warily when approached directly by strangers.
4. Nonsocial fear: Dog behaves fearfully or warily in response to sudden or loud noises, traffic, and unfamiliar objects and situations.
5. Dog-directed fear/aggression: Dog behaves fearfully or aggressively when approached directly by unfamiliar dogs. (In practice this factor can also be broken into two distinct subfactors: Dog-directed aggression and dog-directed fear).

6. Separation-related behavior: Dog vocalizes and/or engages in destructive behavior when separated from the owner, often accompanied or preceded by behavioral and autonomic signs of anxiety including restlessness, loss of appetite, trembling, and excessive salivation
7. Attachment and attention-seeking: Dog maintains close proximity to the owner or other members of the household, solicits affection or attention, and becomes agitated when the owner gives attention to third parties.
8. Trainability: dog learns quickly, shows willingness to attend to the owner, obeys simple commands, fetches objects, responds positively to correction, and ignores distraction stimuli
9. Chasing: Dog chases cats, birds and other small animals, given the opportunity.
10. Excitability: Dog reacts strongly to potentially exciting or arousing events, such as going for walks or car trips, doorbells, arrival of visitors, and/or the owner arriving home; has difficulty calming down after such events.
11. Touch sensitivity: Dog reacts fearfully or warily responses to potentially invasive or painful handling, including bathing, grooming, nail-clipping, and veterinary examinations.

C-BARQ assessments on a subset of 200 dogs referred and treated for behavior problems have also made it possible to establish ranges or reference values of normal and clinically problematic levels of behavior for 7 of these 11 temperament factors.

The results of the national survey confirm strong and consistent differences in behavior among the different breeds assessed, as well as line differences within particular breeds (field bred versus conformation bred). They also permit general estimates of the line-and breed- specific prevalence of clinically significant behavior problems.