



# MOVING BEYOND “LEADER OF THE PACK”

## Changing Dog Behavior Using Science Instead of Myth

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*Most of the unruly behaviors we see in our pets are not due to a desire to gain higher rank. Consequently, dominance theory becomes irrelevant for most behavior problems in our pets.—Sophia Yin, DVM, MS*



When humans welcome dogs into their homes, they frequently consider the new interspecies family to comprise a “pack.” However, even though it seems to be only an issue of semantics, there are associations with the concept of a pack that can harm the human–companion animal bond.

### FALLING FOR “THE LEADER OF THE PACK”

A particularly pernicious inference is that both human and canine members of the pack must compete for *alpha status*. Unfortunately, the belief that dogs must see us through a filter of dominance and subordination sets us up for an adversarial relationship with man and woman’s best friend.<sup>1</sup>

### Development of Dominance Beliefs

The belief that dogs are driven to achieve social dominance over the owner/handler extends from the work of Colonel Konrad Most, a member of the Royal Prussian Police. He had a background in military and police dog training and published a seminal dog training manual in 1910.

To Most, the objective of dog training was “to obtain the permanent and unconditional surrender of the dog. The intimidated state that accompanies it soon disappears, simply because peace again reigns as soon as the man is victorious.”<sup>2</sup> The notion that dogs were compelled to form dominance hierarchies was generated largely from the observation of captive wolves.<sup>3,4</sup>

Unfortunately, the popular understanding of pack social behavior was based, in part, on the behavior of unrelated, captive wolves forced to live together in close quarters, whereas “in natural wolf packs, the alpha male or female are merely the breeding animals, the parents of the pack, and dominance contests with other wolves are rare, if they exist at all.”<sup>5</sup>

Even if the social behavior of wolves was initially misinterpreted by Mech, et al (and subsequently put right by the same authors),<sup>3,5</sup> is it correct to assume that dogs are behaviorally analogous to wolves and form similar social groups? Although it has been argued that free-roaming dogs are socially solitary at times,<sup>6,7</sup> dominance-related group dynamics have been observed in groups of dogs.<sup>8</sup>

However, the question is not whether social dominance is a relevant phenomenon in wolves or dogs, but whether the dominance hierarchy drives canine aggression toward humans, which challenges whether dominance-based “firm handed” training is, therefore, necessary or even appropriate.<sup>9</sup>

### Transition to Intimidation-Based Training

In popular culture, training based on dominance and pack behavior has become synonymous with intimidation-based training methods.

At one time, dominance-related aggression was recognized as the most common reason for dogs to be referred to behavior specialists.<sup>10</sup> Treatment of aggression toward household members relied upon reclaiming dominance over the dog by firmly lowering its social status with more dominance (aggression) from the owner/handler.

It was popularly believed that dog training and behavior management required physical or emotional (psychological) force. Rolling a dog forcibly onto his back (the “alpha roll”) was common and promoted even through a popular television show (*Dog Whisperer*, National Geographic Channel and Nat Geo Wild, 2004–2012), in spite of the likelihood that it would result in owner injury.<sup>11</sup>

Although L. David Mech recanted his conclusions about the dominance hierarchy in captive wolves, family dogs were invariably seen as members of the pack, one where owners must assert themselves in order to maintain their own alpha status.

### Role of Dog-Centric Training

It is only in the last 15 to 20 years that aggression toward owners has been attributed to reasons other than dominance. Recently, there has been a polarization between the older approach and the modern, more benevolent view that dogs are simply animals that deserve humane treatment regardless of their behaviors. The concept that veterinary behavioral medicine and behavior modification can be “dog-centric” rather than “human-centric” is relatively new in the veterinary behavior field.

### IS CANINE DOMINANCE TO HUMANS RELEVANT?

Aversive training methods are often rooted in the assumption that dogs are biologically driven to dominate their human owners, who, therefore, must assert their own dominance in order to control their dogs’ behavior. However, this is a fundamentally flawed concept.<sup>12</sup>

### Anxiety versus Assertiveness

The behavior problems most often seen in dogs—aggression, fearfulness, destructiveness, inappropriate elimination, excessive vocalization, and inappropriate attention-seeking—are associated more frequently with anxiety or frustration than with confidence and social assertiveness.

Observation of the “badly behaved” dog will frequently reveal conflict signals, such as yawning or lip licking, along with anxious or ambivalent posturing. Responding harshly to these signals increases the dog’s fear and reactivity, which, along with genetics, can lead to worsened impulsivity and aggression. In fact, fear is not voluntary and cannot be changed using operant methods, such as reinforcement or punishment.

### The Negatives of Positive Punishment

Punishment is defined as *any stimulus change that reduces the probability of occurrence of the behavior preceding*

*it*. For the purposes of this article, punishment refers to *positive punishment*, that is, an aversive stimulus applied to the animal (in contrast to *negative punishment*, which refers to removal of a desirable stimulus).

In traditional training modalities, punishment-based techniques are common and include:

- Using choke or prong collars, leash corrections, shock, and physical manipulation
- Vocal scolding
- Throwing cans or “pillows” filled with pennies toward the dog
- Forcibly rolling the dog on its back.

Positive punishment is not recommended for management of behavior problems for several reasons:

1. Punishment must be sufficiently aversive to be effective.
2. Punishment must be applied each and every time the behavior is performed, either during or immediately after the behavior.
3. Punishment-based training has been associated with increased incidence of problem behaviors.<sup>12</sup>
4. It is difficult for dog owners to sufficiently and consistently apply punishment, and positive punishment can increase the risk of the punisher being bitten.

Canine dominance is promulgated by the popular media and, unfortunately, frustrated (and well-meaning) dog owners are easily convinced of its truth, in spite of its basis in incorrect conclusions drawn from the behavior of captive wolves in unnatural conditions and groups.<sup>5</sup> There is a trend of “crossing over” by trainers and other dog professionals from intimidation and dominance-based training to progressive, force-free and fear-free methods.

### Redefining Aggression

The diagnosis of *dominance-related aggression* itself has been supplanted by the more ethologically appropriate diagnosis of *defensive, fear-related, or conflict-related aggression*, which better reflects the ambivalence, anxiety, and learned behavior associated with aggression.<sup>13</sup> It is a more sophisticated and accurate paradigm to consider that aggression, inappropriate attention-seeking, and other undesirable behaviors are based on dogs’ anxiety and lack of control over their environments.

One of the most important concepts we can teach our clients is that short-term inhibition of behavior (by using positive punishment) does not indicate that the underlying motivation has changed. Owners who simply understand that something, such as biting, may stem from a state of worry are less likely to respond with punishment or rough handling.

### Comparison of Training Methods

Domination and punishment are counterproductive in the long term, even though they might suppress the undesir-

able behavior temporarily. For these reasons, it makes more sense to help the dog control its environment (for example, if the dog sits down, the backyard door will be opened) so that confidence, predictability, and safety are emphasized, rather than forcing the dog to “submit” through counter-domination.

Herron, et al, used a survey to log both aversive and nonaversive training methods used in dogs presented to a behavior referral practice.<sup>11</sup> Most of the interventions had been recommended by trainers, owners themselves, or television programs. Dogs presented for aggression toward familiar people were significantly more likely to respond aggressively to confrontational methods, such as the “alpha roll” or “dominance down.”

Shock collars are used commonly, and their use, particularly remote-controlled shock, is associated with tongue-flicking, lowered ear posture, lifted front paws, and other signs of stress and compromised welfare, even in situations that do not involve shock.<sup>14-16</sup>

## THE VETERINARIAN'S ROLE

### Referral to Specialists

Owners of dogs with behavior problems are often unsure where to turn for help. A veterinarian is in an excellent position to begin the discussion and help guide the owner to an ethical, humane, and experienced dog trainer, non-veterinary behavior consultant, or veterinary behaviorist (see **Types of Behavior Specialists**).

Clients expect veterinarians to know what is best and who is available, giving veterinarians a great deal of influence when it comes to referral. And veterinarians can assist clients and their dogs greatly if they take time to look at trainers' credentials and visit behavior specialists in the area to become familiar with the methods they use. Veterinarians can also consider adding positive-reinforcement-based training classes to their clinics' services.

### Understanding Behavior Modification

Behavior modification is important not only for basic obedience and social skills, but also for behavior problems of all types, including separation anxiety, thunderstorm fear, and food-guarding. Therefore, knowledge about training methods and philosophies, even those for young puppies, should not be limited to trainers alone.

There are several compelling reasons for veterinarians to familiarize themselves with training philosophies:

- It can be argued that we have a professional responsibility to promote standards of humane care (which include training methods) and, along with that responsibility, to “do no harm.”
- When training methods fail or behavior problems worsen, owners often choose relinquishment or euthanasia, and a patient and client are then lost. Although euthanasia is sometimes the safest solution for a difficult problem, it may be avoidable in some cases.
- Confrontational training leads to increased anxiety and aggression and deterioration of the family-pet relationship. There is often a real risk of injury to the handler

and/or other family members, including children.

- If veterinarians do not have professionals they can recommend, clients may experience “behavior fatigue” and lose interest in pursuing interventions, even if a professional is found later.
- Inappropriate behavioral advice may lead to dissatisfaction with the veterinarian, as well as liability.

## IN SUMMARY

Veterinarians, especially those in primary care, are in a unique position to solicit discussion of behavior and then make recommendations to help with problems. However, it is important to keep up with progressive training methods because relying on outdated philosophies and services can do more harm than good.

Appropriate training methods encompass not only the issue of welfare and ethical handling, but also make use of the validated science of learning—which applies to both nuisance behavior and more serious problems, such as biting. Such information allows the practitioner to:

- Apply the principle of “first do no harm”
- Discuss the validity of the wide range of training

### Types of Behavior Specialists

**Veterinary Behaviorists** (Diplomate ACVB) are board-certified specialists qualified to diagnose and treat both medical and primary behavioral conditions in animals. Currently there are 65 veterinarians worldwide board-certified by the **American College of Veterinary Behaviorists** ([dacvb.org](http://dacvb.org)).

**Certified Applied Animal Behaviorists** (CAAB) have completed graduate-level (master's, doctorate, or veterinary degree with behavior residency) training at an accredited university in the field of animal behavior, demonstrated skill in applied behavior and training, and met the requirements for credentialing by the **Animal Behavior Society** ([certifiedanimalbehaviorist.com](http://certifiedanimalbehaviorist.com)).

**Certified Pet Dog Trainers** (CPDT) are dog trainers who have met the requirements for certification by the **Certification Council for Professional Dog Trainers**. This group certifies trainers on the basis of humane standards of competence in animal training and behavior, standardized testing, and continuing education ([ccpdt.org](http://ccpdt.org)).

**Noncredentialed behaviorists**, such as those who use the titles *behaviorist*, *animal behaviorist*, *pet behavior consultant*, *animal behavior specialist*, and other related titles (which can be used by anyone), have no specific background or education in animal behavior. It is important to carefully review the qualifications, education, and experience of any noncredentialed individual who claims to be a behavior specialist.

## Suggested Behavior/Training Resources

These are listed as suggestions only. Membership or certifications alone do not guarantee training knowledge or methods used. Please familiarize yourself with local dog professionals before making specific recommendations.

- **American College of Veterinary Behaviorists** (dacvb.org): See handbook *Decoding Your Dog*
- **American Veterinary Society of Animal Behavior** (avsabonline.org/resources/position-statements): Position statements on behavior
- **Dogmantics Dog Training** (dogmantics.com): Videos and other resources for dog owners
- **Karen Pryor Academy** (karenpryoracademy.com)
- **Pack of Lies** (nytimes.com/2006/08/31/opinion/31derr.html?pagewanted=all&r=1&): *New York Times* article by Mark Derr; published August 31, 2006
- **Pet Professional Guild** (petprofessionalguild.com)

information marketed to clients through television, the Internet, print media, and neighborhood trainers

- Offer the opportunity to correct misinformation about dominance and “pack” leadership, instead supporting the client’s bond with the dog
- Most important, foster a veterinary–client–pet relationship of trust and safety, leading to a greater chance of training success as well as retention of the dog in the family for life. ■

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