

Veterinary Behaviorists Question Dominance Theory in Dogs

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By: Timothy Kirn

For The VIN News Service

Cesar Millan, television's 'Dog Whisperer,' has legions of fans, including some dog trainers. But a group of veterinary behaviorists is not among them.

The American Veterinary Society of Animal Behavior (AVSAB) issued a new position paper aimed at countering some of the pervasive influence of his show, which airs on the National Geographic Channel, and of Millan's training approach, which is based on what the position statement calls outdated dominance theory.

"The AVSAB recommends that veterinarians not refer clients to trainers or behavior consultants who coach and advocate dominance hierarchy theory and the subsequent confrontational training that follows from it," the position statement says.

That statement was initiated with Millan in mind, says Dr. Laurie Bergman, of Norristown, Pa., a member of AVSAB's executive board.

"We had been moving away from dominance theory and punitive training techniques for a while, but, unfortunately, Cesar Millan has brought it back," she says.

Millan's program began airing in September 2004. It has a large following and has twice been nominated for an Emmy Award for Outstanding Reality Program.

On his show, Millan is invited into homes to work with incorrigible pooches, many that have failed with previous trainers. Usually, he identifies the problem and begins immediate remediation.

He says he is really retraining the owners, not the dogs, and generally notes that his sessions are just a beginning. But he does read the dogs and responds to them with insight and intuition. He often is shown calming and subduing an animal in a short time with minimal effort, communicating with the animal mostly by gaze and posture. Sometimes, the results appear nothing short of miraculous.

Dogs are pack animals and packs are ruled by a dominant alpha male, and that is the problem in the majority of unruly situations he addresses on the show, Millan says. The owners are either milquetoasts or inconsistent, and the dog is lost.

"What I am doing is training the human to meet the needs of the dog," he has stated. "So, by doing that, we are going to eliminate fear, anxiety and aggression."

Millan asserts himself with the dogs and uses a number of negative-reinforcement, or correction, techniques such as alpha rolls (the dog is rolled onto its back, a submissive position) and flooding (the dog is exposed to something that causes it anxiety and is not allowed to escape, to desensitize it).

He also has been shown choking a dog on the end of a leash until it fell onto its side, gasping for air. That is the exactly the trouble with him, say the veterinarian behaviorists. His techniques are likely to have only a temporary effect and may be harmful in some instances.

The American Humane Association sent a letter to National Geographic in 2006, complaining that Millan's techniques were "cruel and dangerous." The association asked that the program be removed from the airwaves.

The AVSAB position statement says that the ideas that dogs act like pack animals and that packs have a strict, dominant alpha-dog hierarchy are erroneous.

Dogs have lived with humans for 15,000 years, and they evolved as scavengers, not hunters. So it is not legitimate to compare dogs with wolves and wolf packs, which do hunt, according to the statement. The evolutionary pressure on dogs was that the least shy animals were the most successful in ransacking human refuse. Today's free-roaming dogs live in small, less cohesive groups rather than packs and are often alone.

Moreover, the notion that every pack has an aggressive alpha male that rules over all the others originated from observations of captive wolves. But, research on wild wolves suggests that wolf packs are not rigidly controlled by a single domineering male, according to L. David Mech, a senior scientist with the U.S. Geological Survey who has studied wild wolves in Michigan and Northern Minnesota for more than 40 years.

Mech says a pack usually has an alpha pair and that most of the rest of the pack is that pair's offspring. That means the lead male never fought for dominance but merely reproduced. The lead male does not always lead during hunts or in anything else for that matter.

In fact, Mech says he generally objects to the term "alpha" male — a term he once used — because what it implies is not accurate.

Dominance theory leads to an antagonistic relationship between human and pet and to negative and coercive training methods, the AVSAB statement says. A punishment approach can backfire.

"It won't change the underlying state of fear, so the fear will come out when the stimulus is no longer there," says Dr. Sophia Yin, of the University of California-Davis and an AVSAB Executive Board

member.

Though Millan has been criticized by a number of different groups and individuals, he has supporters. A New Yorker profile published in 2006, compared Millan's movements and posture to that of a dancer's and described his ability to communicate with dogs as masterful. Because of the precision of those movements and the messages they convey, he was equated to a therapist who works with autistic children.

"I have never seen Mr. Millan be abusive," says Martin Deeley, executive director of the International Association of Canine Professionals.

Millan does not use coercive techniques exclusively, but also uses positive reinforcement, says Deeley, who has worked with Millan and knows him well.

That combination is what most trainers use today, Deeley says. For a while, the pendulum in training approach was swinging toward the exclusive use of positive reward, but now it is swinging back.

"I think what people have found is that positive reinforcement and reward is not working with every dog," he says. "I don't think any dog can be trained using only positive reinforcement."

On the show, Millan says: "I always say my way is not the only way. It is just one way. The people that follow me feel that it works."

Deeley considers Millan's instinctual rapport and ability to communicate with dogs astounding and says it is clear that he cares about dogs.

Millan heads a foundation that supports shelters and rescue organizations across the country. Long before he was famous, Millan opened a center for abused and rescued dogs in a rough part of South Central Los Angeles. On his program, he's shown taking walks with his pack of rescued dogs down the streets of South Central and in the mountains surrounding the city.

"I have found his respect for the dogs and his love for the dogs is very great," Deeley says.

Heather Houlahan is another trainer who backs Millan's techniques.

"Demand for private dog training definitely increased in the two years after his show debuted, and many owners contacting me specifically cited Cesar Millan as inspiring them to do something about their dogs' behavior," says Houlahan, of Cranberry Township, Pa., who trains search-and-rescue dogs and works with seized dogs.

Millan speaks in language that the average pet owner can understand, and what is particularly important, he shows the public that even a difficult dog can be taught, she says. The public, therefore, gets the message that training, done properly, will produce results.

"Within the bounds of the medium — which is stupid — he shows results and he communicates well," she says. "He uses plain English, which I believe is very important, and he is a very good chap with the dogs. I think the show has basically done good."

The AVSAB statement annoys Houlahan. She questions the science behind it and says dogs do exhibit dominance behavior and when they do, need to be corrected.

"They are picking on Cesar Millan, but they are also picking on the entire community of results-based trainers," she says.

Yin and the AVSAB, however, believe Millan's influence has led to a greater use of punitive training and to a misunderstanding of canine intent. Yin thinks his teachings lead the general public to view all canine misbehavior as dominance aggression, when that is not the case.

The dog who fails to come when called is not exhibiting an intention to establish dominance over the caller. Rather, dominance behavior is "when animals use aggression for scarce resources," Yin says. She is particularly troubled by Millan's use of flooding. The technique is brutal, and it is not the way psychologists practice desensitization, she says. Real desensitization involves exposing the subject to the anxiety-producing stimulus in a gradual, controlled manner and is combined with positive reinforcement, she adds.

"Since he has been using those techniques, they have become more popular with the general public," she says.

Yin wants veterinarians to warn dog owners to avoid any trainer who uses punitive techniques too heavily and advises practitioners to tell their clients to look for three signs that a trainer is too negative:

1. The trainer continually tells owners that they have to be the "alpha."
2. The trainer warns owners not to use rewards too much. It is not rewards that are the problem but how they sometimes are not used correctly.
3. In a class, more than 10 percent of the dogs are on pinch collars or shock collars. Shock collars should never be used as an initial training device, according to Yin.

Beyond the "Dominance" Paradigm

By [Patricia B. McConnell, PhD](#)

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It happened in Scotland, where I attended a conference on animal welfare in the 1990s. My host had escorted me into a crowded room at cocktail hour, and then tapped a spoon against her glass to get the group's attention. "Everyone," she said, as the crowd turned and looked toward us expectantly. "Everyone, please meet Dr. Patricia McConnell from the States. She's an ethologist." At the word "ethologist," a collective "ooooh" floated toward me from the crowd. I might even have heard some "ahhhhs"! It wasn't me who got the reaction, it was my profession. Everyone seemed to know what ethology was, and most importantly, was eager to talk about it. In short order, I was surrounded by individuals enthusiastically discussing animal behavior, everything from the mating rituals of ruffled lemurs to the antics of the Labrador Retriever in their living room.

I think of that evening in Scotland when I am introduced as an ethologist here at home in the US. More often than not, the word is changed into "ecologist," as if somehow we had collectively developed a kind of a lisp, and had really meant ecologist all along. "Ethology" isn't a term that's widely familiar in this country, and I wouldn't mind that so much if this lack of awareness hadn't led to the mis-use of the term as it relates to dog training.

This most often happens when people with no academic background cite ethology as a justification for "getting dominance over your dog" as a way of solving all behavioral problems. To the collective amazement of many of us in the behavior and training field, methods emphasizing this perspective have recently cropped up again in this country. Does your dog not come when called? Does he urinate on the carpet? Well, then, we're told, that's because you haven't established a clear pack hierarchy.

Ah, my. Now, don't get me wrong. I'm on record as arguing that dogs, as animals dependent upon us for their very food and water, need us to be benevolent leaders (as do children). Neither do I agree with those who argue that there's no such thing as a social hierarchy in dogs—surely there's a reason dogs greet one another with tails up or tails down, for example. However, that doesn't mean dominance has anything to do with coming when called or peeing on the rug. There's no logic in explaining away every behavioral issue as being related to dominance or submission, just as it would be illogical to excuse one's own bad habits using the concept of social status. Good luck with explaining that you ate three pieces of mocha fudge cake because you're confused about your place in society.

Advocates of the "getting dominance over your dog as the answer to everything" perspective often support their argument by citing scientific evidence—especially data from ethologists—that dogs are pack animals. As such, they argue, dogs don't need love from us, they just need to know their place. Sigh. About the only thing that's true about this argument is that dogs are indeed highly social animals. And it's true that we learned that from ethologists.

Ethology is the study of behavior, with an emphasis on an animal's behavior in its natural environment. The current use of the word began in Europe in the 1930s, when Konrad Lorenz, Karl von Frisch and Niko Tinbergen began the work that would eventually win them a Nobel prize in 1973 for their studies on behavior. These European scientists were especially interested in observing animals in the wild, as opposed to the then-pervasive American practice of studying animals' behavior in captivity. Eventually, this type of fieldwork led to David Mech's vast body of research into wolf behavior, and to Jane Goodall's forays into Africa to observe chimpanzees in the wild.

One of the many aspects of behavior that interested these early ethologists was social organization, and much of their initial work attempted to understand how animals related to one another and how they organized their social relationships. It is true that, in the '40s and '50s especially, ethologists were fascinated by issues related to social hierarchy and status. It was also during those same decades, 50 or 60 years ago, that much was written about dominance (male dominance in particular), as well as about the function and evolution of aggression. That doesn't mean these issues are the only ones ethologists are interested in, it just means that back then, matters related to status and hierarchy got a lot of attention.

At the same time that ethologists were discovering social hierarchies in a multitude of species, American animal behaviorists were dispensing food treats and using electric shocks

on mice, rats and monkeys to understand the learning process in animals. Along the way, things were done to animals that most of us would rather not think about. The reason that educated behaviorists and trainers are convinced that positive reinforcements (like tasty snacks) are more effective in dog training than "positive punishment" (like electric shocks) is because thousands and thousands of animals were experimented on in ways that would never be allowed today.

Although I wish I could go back in time and prevent some of the suffering that was caused by these experiments, it is true that much good has come from them. Just as modern-day ethologists build on the early work of Lorenz and Tinbergen, learning theorists and psychologists have profited greatly (as have dog trainers) from the early work of American behaviorists like Watson and Skinner. However, it doesn't mean that today's psychologists advocate using electric shock on your dog any more than ethologists advocate using force to achieve "dominance over your dog."

People who argue that ethology supports "getting dominance over your dog" are not only focused on an issue more relevant 50 years ago than today, they are misrepresenting the findings of early researchers on social hierarchy. Social hierarchies are complicated things that allow animals to live together and resolve conflicts without having to use force every time a conflict comes up. Social status is but one of many factors that influence an animal's behavior, and it only relates to an animal's behavior in specific circumstances. It's relevant, I would argue, when dogs are greeting one another, when they are in potential conflict over who gets the bone or who goes out the door first, but it's irrelevant when a dog is deciding to come (or not) when called. High status wolves don't bark out a COME command to subordinates, and they don't punish young pups for "disobedience" if they don't do a perfect recall when asked. Status just isn't relevant in most social interactions. Further, studies on a raft of social species have made it abundantly clear that relationships between individuals are based as much on individual personality and learning as they are on social status. Thus, using "dominance" as a foundation of a training program ignores all that ethologists have discovered about the nuances of communication and social interaction, and all that psychologists have come to understand about the learning process. Ethology is no more about "getting dominance over your dog" than psychology is about using electric shock to influence behavior. Both scientific perspectives provide us with a rich and textured foundation that informs academic and dog-lover alike. From understanding subtle visual signals that tell us when our dogs are anxious to knowing when to reinforce our dog's behavior and when to withhold a food treat, ethology and psychology can work hand-in-hand to help us improve our relationships with our dogs. Neither advocate using force or physical punishment as the primary method of training dogs.

The next time someone tries to seduce you with bad science by saying that "ethology justifies using force to control your dog," don't hesitate to challenge them. Science is on your side-put Lorenz and Skinner in your pocket and use what we've learned in both ethology and psychology to enhance, not diminish, the relationship between you and your dog.

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HOT TOPIC: The D Word

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Dominance in domestic dogs has been in the headlines lately. According to a new study by researchers at Bristol Vet School, establishing the position in the pack is not the main motivator for pet dogs. Training concepts that rely on dominance reduction are likely to be useless at best or at the extreme, downright dangerous. The end result is likely to be a fearful dog that does not feel able to express natural behaviours ó a welfare issue in its own right; or an aggressive dog.

The idea that owners must position themselves as leader of the pack has been questioned by behaviourists for several years now. The new study is based on observations of dogs at Dogs Trust re-homing centres and a review of studies of feral dogs. The researchers concluded that dogs learn through experience, rather than being motivated by a desire to exert dominance.

There has been widespread concern by animal charities and behaviourists that television behaviourists who advocate techniques to dominate the dog, such as pinning the animal to the floor, have been responsible for serious behavioural problems, with some dogs having learned to show aggression in an effort to avoid punishment.

Techniques that are widely used to avoid dominance problems, such as feeding the dog after the family has eaten and going through doorways first are also worthless, say the researchers, as they merely show the dog what to expect in certain situations.

Meanwhile a study published in the same month from a research team working out of the University of Córdoba claims that 40% of dominance aggression in dogs is associated with a lack of authority on the part of the owners who have never performed basic obedience training with their pets or who have only carried out the bare minimum of training. The team say owner-dependant factors have the most influence over aggression in dogs and that is associated with first-time dog ownership; failure to subject the dog to basic obedience training; spoiling or pampering the dog; not using physical punishment when it is required; buying a dog as a present, as a guard dog or on impulse; spaying female dogs; leaving the dog with a constant supply of food, or spending very little time with the dog in general and on its walks. Confusingly, the researchers suggest that owners -re-establish dominanceø over their pet to correct the behaviour.

So where does this leave us when it comes to making a recommendation to an owner. Well the -dominanceø theory has little credence with the UKø top behaviourists. Sarah Whitehead is a behaviour specialist and APBC member from Windsor, Berkshire, øSo called -rank reduction programmesø have once again become popular with owners believing that they have to perform -alpha rolloversø on their dogs, or deny them rewards, such as attention, comfort, or food in the name of leadership. Of course, these have an emotional and behavioural impact. The removal of an expected reward is in fact a psychological punishment. If a dog repeatedly performs a behaviour which the owners find infuriating, such as barking, attention seeking, or

pulling on lead, ask yourself what's reinforcing it. These are not symptoms of dominance or so-called "alpha" behaviour. Your dog is not trying to challenge for leadership. It's far more simple and obvious than that: dogs repeat behaviours that get rewarded. Of course, rewards include getting to the park at top speed, eye contact, vocal contact and physical contact. They also include getting humans wound up, cross and upset. Moving away from imposing a set of dominance rules does not mean being out of control. Indeed, clear signals of reward and non-reward are essential for dogs. They need boundaries, but what these are will depend on the dog and the owner's specific needs.

Rachel Casey is one of the authors of the Bristol paper and has these words of caution for those unsure as to how to interpret available studies, "Unfortunately the concept of "dominance" is well embedded in historic scientific literature and the public consciousness. In fact, some texts and papers still define some presentations of aggressive behaviour as "dominant" because they are using definitions of particular behavioural presentations from older literature. Pérez-Guisado and Muñoz-Serrano (2009) have conducted research investigating potential risk factors for "dominance aggression" In doing so they have used a particular collection of behavioural signs, defined them as "dominant" based on previous literature, and investigated environmental risk factors for dogs showing this collection of signs. This is interesting in that it gives further information about potential risk factors for this collection of signs, but cannot be concluded to support the hypothesis that dogs develop such signs because they are motivated to be "high ranking" "

The ground breaking work carried out by the Bristol team is sure to have many implications for the future interpretation of canine behaviour. Many in the profession are keen to know more and at our request Rachel Casey has written a comprehensive article on the topic especially for Veterinary Matters. The article explains how owners make mistakes by believing that their dog is seeking to achieve higher status and gives some practical examples. To receive your copy email jane_quail@hillspet.com

Reference:

"Dominance in domestic dogs . useful construct or bad habit?" by John W. S. Bradshaw, Emily J. Blackwell, Rachel A. Casey. Journal of Veterinary Behavior: Clinical Applications and Research, Volume 4, Issue 3, Pages 109-144 (May-June 2009).