

t's been a long time since mainstream dog training focused on teaching dogs that the human is always the boss. Yet many people who love their puppies and adult dogs still believe that the way to be their dogs' best friends is to dominate their dogs and teach them who is really in charge. This is perplexing. Equally perplexing is belief in the "rightness" of using aversive training techniques despite demonstrations that these techniques are harmful. And most perplexing of all? These notions of dominance and the "alpha" have persisted in the face of a great deal of evidence showing that they are often harmful.

I wanted to understand why trainers and owners continue to emphasize dominance and continue to justify the use of aversive training techniques. I wanted to understand the research that could be changing minds about dominance and aversive training. And I wanted to understand why minds are not changing despite that research.

Where do dog owners get most of their information? Not from peer-reviewed journals, not from blog posts from the Duke Center for Canine Cognition, or the Family Dog Center in Budapest, Hungary, not from the excellent videos Sue Sternberg, kikopup, and many others post for free on YouTube, and most definitely not from publications like this

one. Rather, most dog owners get their information about dog behavior in the same way that they get information about anything else: from television and the internet.

Sometimes they get their information from dog trainers. That's great if the trainers themselves have up-to-date and accurate information about what works and, even more important, what hurts. Unfortunately, there are still many trainers and self-identified experts who are unaware of what researchers have learned during the past 15 to 20 years about how dogs think, feel, and behave.

Everything I've written so far is familiar to many trainers, and to some owners. But not to all trainers, and certainly not to all owners. People who own dogs, care for dogs, and train dogs clearly love dogs. The questions I pose here are not about *caring*. Rather they are questions of *knowing*. What is stopping new, and some not so new, information from affecting the choices of trainers and owners of dogs?

In my work as a psychologist with human patients, I often have to make decisions without as much science to guide me as I would like. Psychology, like dog training, is as much art as science, and sometimes there are several approaches to choose from, none of which has been clearly demonstrated

www.APDT.com

Summer 2015 ◆ *The APDT Chronicle of the Dog* ◆ 11

to work better than the others. In those instances, I have to rely on experience, intuition, and clinical judgment. But, when science is available that shows a certain technique to be harmful, I am ethically bound to abandon it, no matter how long I've been using it, and no matter how much expertise I've developed in its use. Shouldn't the same be true for those who have canine clients?

I set out to learn why these outmoded and harmful ideas persist among the dog-loving public, and among some trainers, and to identify resources that might be used to educate the public and trainers about current best practices. I began by asking experts from California to New England what they thought accounted for the continuing popularity of these outmoded ideas. They all had the same three-word answer: "The Dog Whisperer." It's true that the show is very popular, and that Cesar Millan has been hugely influential. But has the Dog Whisperer convinced people that dominance-based techniques are best? Or is the show popular because people already believe that dogs should be compliant, and that punishment, even severe punishment, is an appropriate way to get that compliance?

Jeninne Lee-St. John's 2010 story for *TIME*, "Dog Training and the Myth of Alpha-Male Dominance," began:

"Dogs are descended from wolves. Wolves live in hierarchical packs in which the aggressive alpha male rules over everyone else. Therefore, humans need to dominate their pet dogs to get them to behave. This logic has dominated the canine-rearing conversation for more than five years, thanks mostly to National Geographic's award-winning show, 'Dog Whisperer with Cesar Millan.' But many experts say Millan's philosophy is based on now-debunked animal studies and that some of his techniques — most famously the alpha roll, in which he pins a dog on its back and holds it by the throat — are downright cruel."

As far as I can tell by reading his website and online interviews, Cesar Millan was drawn to dog training out of a love for dogs, a lot of natural understanding, and a lot of natural ability to connect with dogs. There is absolutely no indication that he has ever intended to cause harm to any animal. Although Millan's approach appears to be largely intuitive and the result of his natural ability to connect with animals, rather than the result of formal study, he does credit one author as being important to him. In a Q&A with Powell's City of Books, Millan was asked about his favorite sentence or passage from another writer. His response was, ""There is no knowledge behind instincts or reactions." — Leon F. Whitney, PhD, DVM, in my favorite dog book ever — a classic, Dog Psychology: The Basics of Dog Training."

If Whitney is indeed the expert's expert, perhaps we should all rush out and buy copies of his books. But first, let's think

about this quote: "There is no knowledge behind instincts or reactions." To anyone familiar with learning theory, it is clear that this is Whitney's attempt to channel the voice of the famous experimental psychologist E. L. Thorndike, whose statement that animals cannot possibly think or learn by imitation was state of the art in 1911. We've learned a lot since then, and indeed had learned a lot by the time Whitney wrote *Dog Psychology*. But Whitney's understanding of learning theory is muddled at best. On page 190 of the 1986 printing, Whitney says:

th

ar

dc

as

of

fee

OC

he

re

ar

cr

in

W

th

tr

in

W

kı

th

st

if

B

d

11

"Negative conditioning is the quickest way of stopping a bad behavior — of brainwashing it out of existence. It is simply the application of the process of extinction. The effect of a strong negative reinforcer, whipping, a shock, a bucket of water thrown on the dog, such things decrease the frequency of occurrence. Or suppose a dog has a habit of jumping up on persons. You break him by saying No or Down while stepping hard on his hind toes while he is standing against you."

Whitney doesn't understand learning. "Negative conditioning" is a term of his own making; it has no meaning in learning theory. Extinction is not a process that is applied; neither it nor negative reinforcement are the same as punishment. A positive reinforcer reinforces by being presented. A negative reinforcer reinforces by being removed. A tight leash is slackened, a loud noise (or an electric shock) is turned off. *Dog Psychology* shows its author's lack of understanding of animal learning and of the ultimate effects of punishment-based training.

Despite his ignorance of how learning really works, Whitney has influenced a great many veterinarians and dog trainers. I wanted to learn more about the person who has influenced so many others. Besides breeding hunting dogs and writing books about dogs, Whitney had another passion: eugenics. In 1935 he wrote The Case for Sterilization, in which he advocates sterilization of "undesirables," especially immigrants. In reference to the forced sterilization program of Nazi Germany, Whitney wrote, "Holding no brief for Herr Hitler, approving his action only because it has served to bring dramatically to public attention a movement that I have long been interested in, I hope in this book to clarify the subject of sterilization in all its most important aspects ... We live in an age of social control, and here in eugenics lies our most glorious opportunity of controlling the quality of our children and our children's children."

An apologist might point out that Whitney was born at the end of the 19th century and that many other people had these ideas too. The fact that other people shared these horrible ideas doesn't make them less horrible. And they are relevant to any evaluation of Whitney's capacity to understand animals. I believe that Whitney's profound lack of empathy and sanguine acceptance of the "necessity" for actions that

thinking people recognize as cruel, racist, and inhumane are also present in his ideas about the psychology of dogs. In his book, it's quite clear that Whitney saw dogs as only bundles of reflexes and muscles. The possibility

of dogs as thinking or feeling beings did not occur to him. Neither did he consider the quality of relationship between dog and human. Might some of those old, unfounded, even cruel ideas have had an influence on some trainers, perhaps even on the Dog Whisperer? I believe that the answer is yes, and that frainers, including the very influential Dog Whisperer, would be shocked if they knew more about the origins of some of the principles they have adopted. Would Cesar Millan and other contemporary dog trainers still list Dog Psychology among their favorite books if they knew this? I doubt it.

Believing that one must dominate one's dog, combined with an absence of understanding for the dog's

capacity to think, feel, and learn can lead to the belief that aversive techniques are appropriate, perhaps needed. Trainers who use and advocate these techniques believe that they are applying the latest scientifically based knowledge about dog behavior when they emphasize that the human needs to be "a strong leader" as a justification for the use of shock collars, prong collars, and even hanging by a lead. This is the old paradigm: The human must teach the dog that the human is the alpha, and being the alpha means meting out rewards and punishments. The reliance on dominance and aversive techniques shows the influence of an old paradigm. It dates from a time when dogs were seen as bundles of reflexes and habits. It dates from a time when there was no guidance for dog trainers or dog owners from scientists. It dates from a time before we knew that dogs are cognitively and emotionally complex animals.

Acording to Ádám Miklósi, director of the Family Dog Project, and head of ethology at Eötvös Loránd University:

"The alpha dog concept goes back to the beginning of the last century. Lorenz was the first and had a huge influence. He was a wonderful observer but he misinterpreted the relationships with this dominance terminology. It's actually more about cooperation, with a leader who has more knowledge about the world, and more experience. For pet dogs, the human

> makes the plans. It's not the same as dominance. It's collaboration, even if it's asymmetric. The concept of family is often disregarded — working together for the benefit of the family."

Just as researchers now know that dominance does not function as they once thought it did, they also know that aversive training techniques have negative consequences. In 2007, Karen Overall, VMD, PhD, of the Center for Neurobiology and Behavior at the University Pennsylvania School of Medicine, wrote important editorial in the Journal of Veterinary Behavior: Clinical Applications and Research. In this editorial, Overall refers to some of these findings:

When science is available
that shows a certain
technique to be harmful, I am
ethically bound to abandon
it, no matter how long
I've been using it, and no
matter how much expertise
I've developed in its use.
Shouldn't the same be true
for those who have
canine clients?

"We have known for decades that shock works to teach avoidance and cessation of behavior, which in the extreme form often examined in the psychologic literature, is referred to as 'immobility.' It is this criteria of 'immobility' by which learned helplessness is accessed (Seligman, 1971). No one who is recommending shock for treatment of behavioral problems has evaluated scientifically the extent to which they may be inducing learned helplessness."

Overall also says, "It is often claimed that clients find that the dog [as a result of aversive techniques] becomes 'obedient.' Obedient dogs can be quite distressed, and suffer from profound anxiety while complying with a request." Overall refers to studies that found that choke collars can lead to eye problems, that both choke and prong collars can cause "neck instability, degenerative arthritis, and recurrent laryngeal nerve paralysis," and that training with shock produces "untoward, negative, long-term effects."

In 1872, over 20 years before Whitney's birth, Charles Darwin (yes, that Darwin) wrote *The Expression of the Emotion in Man and Animals*. Darwin writes about emotion

www.APDT.com

Summer 2015 • The APDT Chronicle of the Dog • 13

in dogs as though it were the most obvious thing in the world:

"The same principle probably explains why dogs,

"Only if clients have the

critical skills that allow them

to read and evaluate the

information available to them

can they ask for humane

help. It is only in this way

that we can interrupt the

cycle of violence so many

have perpetuated."

when feeling affectionate, like rubbing against their masters and being rubbed or patted by them, for from the nursing of their puppies, contact with a beloved object has become firmly associated in their minds with the emotion of love. The feeling of affection of a dog towards his master is combined with a strong sense of submission, which is akin to fear."

Darwin, the masterful observer, goes on to describe a submissive posture as something the dog occasionally and voluntarily adopts in the presence of its master, not as something the master imposes on his dog. No al-

pha rolling here. Darwin may not have been the first to understand the complex inner life of dogs, but he was certainly the most famous. Why his ideas did not achieve currency for 120 years is a bit of a mystery.

One reason that old training methods based on dominance persist is that they seem to work. They do produce behavioral compliance. As long as people believed that dogs were dumb mute creatures with no capacity for awareness, thought, or feeling, compliance seemed a reasonable goal. As long as one cannot discriminate between compliant behaviors motivated by fear and those motivated by a desire to please, by the presence of a reciprocal relationship, the old paradigm seems to work well.

In 1976, 104 years after Darwin published *The Expression of the Emotions*, Donald Griffin, the director of the Institute for Research in Animal Behavior, and professor of zoology at various times at Cornell, Harvard, and Rockefeller Universities, published a little book called *The Question of Animal Awareness*. I remember reading this with huge interest when I was in grad school and being told by friendly faculty that only someone of Griffin's stature (his undergraduate work while at Harvard led to the discovery that bats navigate in the dark by echolocation) would dare write such a book. In this book, Griffin says that non-human animals are cognitively aware, not just

bundles of reflexes or black boxes that react to certain kinds of conditioning, whether operant or classical. Why have dog trainers and owners not incorporated current, or even recent, scientific findings into their work? I believe

there are four reasons.

First, change is difficult. How long did it take Copernicus to convince people that the Earth was not at the center of the solar system? The old methods have been around a long time; people are used to them. The information needed to rethink one's beliefs is not always accessible.

Second, the negative consequences of trying to dominate one's dog and of using techniques like the alpha roll or so called "training tools" like prong collars or shock collars may not be apparent right away, and may not be apparent at all if

one is looking only at compliance and obedience. They seem to "work."

The third reason, one that is perhaps less obvious and more unfortunate, is that there may be some, often unconscious, pleasure in subjugating another being to one's control. It is easy to justify using strong, even harsh measures to do this.

Finally, dog training that incorporates newer findings is in some ways more difficult, even though the results can be wonderfully rewarding. Ádám Miklósi says, "We want everything at the push of a button. People don't want to invest the time. If you want a friend, you have to invest the energy to have a friend." And Karen Overall echoes his thoughts: "Putting to use the knowledge we have regarding canine cognition and learning depends on doing something that was antithetical years ago: working with the dog as a cognitive, reasoning individual in a partnership based on the best use of everyone's skill sets. This is a heck of a lot harder than treating dogs simply as another tool that cannot reason."

Meghan Herron, DVM, DACVB, director of the Behavioral Medicine Clinic at the Ohio State University Veterinary Medical Center, says:

"We live in a hierarchical society — so linear hierarchy makes sense to us. The concept is familiar

14 • The APDT Chronicle of the Dog • Summer 2015

www.APDT.com

and there may be some satisfaction in being higher up on that chain. How does one change undesirable behavior? It all depends on what the goal is. Aversive and punitive techniques often lead to a temporary inhibition of behavior, which may mimic successful behavioral change. That said, if you recognize that true success is a change in the underlying motivation for the behavior, which in the case of almost all dog aggression is fear and/or perception of threat, then inhibition of behavior will not achieve that goal."

I strongly believe that dog trainers and dog owners all love their dogs, and many have great empathy and natural human-dog communication skills. None of them want to inflict pain on the dogs they live with or work with. Rather, they all – owners and trainers alike – want their dogs to be happy and healthy. They want to enjoy wonderful relationships with their dogs. If they continue to believe that these goals can be met by dominating their dogs and using aversive training techniques, perhaps in conjunction with reward-based techniques, it is largely because of misinformation.

For those who want to contribute to a more productive dialogue, I can do no better than to quote Karen Overall's 2007 editorial again:

"If we can encourage our clients to participate in the discussion about how we know something, they can begin to evaluate the incredible effluence of argumentum, ad hominem, themselves. Only if clients have the critical skills that allow them to read and evaluate the information available to them can they ask for humane help. It is only in this way that we can interrupt the cycle of violence so many have perpetuated."

References

Darwin, C. (1872) *The Expression of the Emotions in Man and Animals*. London: John Murray.

Griffin, D.R. (1976) *The Question of Animal Awareness: Evolutionary Continuity of Mental Experience.* New York: Rockefeller University Press.

Herron, Meghan, personal communication with author, March 2015.

Lee-St. John, Jeninne (2010) "Dog Training and the Myth of Alpha-Male Dominance," *Time*, July 30, 2010 (content. time.com/time/health/article/0,8599,2007250,00.html)

Miklósi, Ádám, personal communication with author, March 2015 Overall, K. (2007) "Why electric shock is not behavior modification." *Journal of Veterinary Behavior: Clinical Applications and Research*, Volume 2, Issue 1, January–February 2007, Pages 1-4

Powell's City of Books, Q&A: http://www.powells.com/ink/millan.html

Whitney, L.F. (1934) *The Case for Sterilization*. New York: Frederick A Stokes Co.

Whitney, L.F. (1964) *Dog Psychology: The Basis of Dog Training*. Springfield, Ill: Charles C. Thomas

Additional Reading

Bradshaw, J.W.S, Blackwell, E.J. & Casey R.A. (2009) "Dominance in domestic dogs—useful construct or bad habit?" *Journal of Veterinary Behavior: Clinical Applications and Research*, 4 (3), 135-144.

Mech, L. David (1999) "Alpha status, dominance, and division of labor in wolf packs." Canadian Journal of Zoology, 77:1196-1203.

Overall, K. L. (2007) "Considerations for shock and 'training' collars: Concerns from and for the working dog community." *Journal of Veterinary Behavior*, 2, 103-107.

Topál, J., Miklósi, Á., Csányi, V. (1998) "Attachment behaviour in dogs: a new application of Ainsworth's (1969) Strange Situation Test." *Journal of Comparative Psychology*, 112: 219-229.

This is how Sasha, the author's Dachshund mix, describes him: "A Beagle named Heidi came into Dr. Goldenthal's life when he was very young, and there has always been a dog in his life since then. Since he became a clinical psychologist working with children, adults, and families, a dog has been a fixture in his office, making him quite an expert in animal-assisted therapy, although I prefer to think of what we do together as co-therapy. Humans will probably want to know that Peter Goldenthal, PhD, ABPP, studied and trained at Cornell, the University of Connecticut, and Harvard Medical School; has published five books; is board certified in two psychological specialties; has lectured in four countries; and is currently writing a book about creating mutually therapeutic human-dog relationships. I'm not so interested in credentials; I just know that I'm an extremely happy and lucky dog. You can reach Dr. Goldenthal by email: pg@drpetergoldenthal.com."

www.APDT.com

Summer 2015 • The APDT Chronicle of the Dog • 15