Evidence supports the use of reward-based methods for all canine training. AVSAB promotes interactions with animals based on compassion, respect, and scientific evidence. Based on these factors, reward-based learning offers the most advantages and least harm to the learner’s welfare. Research supports the efficacy of reward-based training to address unwanted and challenging behaviors. There is no evidence that aversive training is necessary for dog training or behavior modification.

Reward-based techniques should be used for teaching common training skills as well as to address unwanted behaviors. The application of aversive methods—which, by definition, rely on application of force, pain, or emotional or physical discomfort—should not be used in canine training or for the treatment of behavioral disorders.

As the role of companion animals has evolved, their welfare and the relationships between humans and animals have become increasingly important. It is understood that animals are sentient and should be treated with respect and compassion.

Learning manners and skills can help animals to co-exist harmoniously with people in the home and in society. The techniques used to teach these manners and skills can strongly affect an animal’s future behavior and emotional wellbeing.

Training methods are most effective when they focus on teaching the animal what to do, rather than punishing them for unwanted behaviors. Common training issues such as jumping, barking, and housebreaking can be managed by arranging the environment appropriately and reinforcing desirable responses. More serious behavior concerns such as aggression, anxiety, and fear require a treatment plan that includes environmental management, behavior modification, and, in some cases, medication. Environmental conditions that drive the behavior should be addressed and the dog should be set up to make appropriate responses. Management can include avoiding situations that lead to the unwanted behavior and ensuring the safety of all involved.

Many methods of changing behavior in dogs are effective; however, the evidence-based veterinarian or behavior consultant should be concerned not just with what is effective but what does the least harm and produces the best long-term results. Current literature on dog training methods shows a clear advantage of reward-based methods over aversive-based methods with respect to immediate and long-term welfare, training effectiveness, and the dog-human relationship.

Exhaustive analyses of dog training literature have been completed and are available for review. A brief summary of the current evidence regarding canine training and some common questions about training techniques are addressed in this document.

**Detrimental Effects on Animal Welfare**

**Acute Effects**

In observational studies, dogs trained with aversive methods or tools showed stress-related behaviors during training, including tense body, lower body posture, lip licking, tail lowering, lifting front leg, panting, yawning, and yelping. Dogs trained with reward-based methods showed increased attentiveness to their owner.5

**Long-Term Effects**

Survey studies have shown an association between the use of aversive training methods and long-term behavior problems, including aggressive behavior towards people and other dogs, and anxiety-related behaviors.
behaviors such as avoidance and excitability. Survey studies cannot differentiate between causation and correlation, so possible explanations for this association include: 1) aversive training methods directly cause or contribute to the development of problem behaviors; or 2) owners of dogs with problem behaviors are more likely to use aversive training tools. Regardless of the explanation, this association shows that aversive training methods are not effective in eliminating problem behaviors: if they did, we would see the opposite trend of decreased behavior problems with increased use of aversive training. In contrast, dogs trained with reward-based methods have lower rates of behavior concerns compared with dogs trained with aversive methods.

Several studies show the effect of aversive training persists beyond the time of training. After dogs learned a cue taught using aversive training methods, they continued to show stress-related behaviors when the cue was presented, suggesting the cue itself had become aversive. In 2020, de Castro et al found that dogs trained with aversive methods were more ‘pessimistic’ on average compared to dogs trained using reward-based methods.

### Training Effectiveness

Reward-based training methods have been shown to be more effective than aversive methods. Multiple survey studies have shown higher obedience in dogs trained with reward-based methods and lowest for dogs trained exclusively with aversive-based methods. Dogs trained with a combination of rewards and aversive-based methods (often referred to as ‘balanced’ in the dog training industry) produced lower obedience levels than reward-based but better than exclusively aversive-based training. Aversive training has been shown to impair dogs’ ability to learn new tasks.

### What are some examples of techniques that may be used by a reward-based trainer?

Trainers may use verbal or visual cues to signal (request) the required behavior, a clicker or verbal marker to mark the behavior, and toys, treats, or other appropriate reinforcers to reward the behavior. Capturing, shaping, and luring may be used to teach desired behaviors.

### Does reward-based training mean that dogs are allowed to do unwanted behaviors?

Use of reward-based methods does not mean dogs are allowed to do anything they want. All animals learn best when given appropriate structure, routine, and guidelines. However, it is imperative that these boundaries be taught without the use of fear, intimidation, or pain.

### Are aversive training techniques appropriate for animals who exhibit aggression?

Animals with challenging behavior disorders such as aggression should be treated with effective, compassionate, and humane methods of training, rather than with “a heavy hand”. There are no exceptions to this standard. If a trainer is having difficulty modifying a particular behavior, they should consult with another reward-based trainer, or refer to a veterinarian, board-certified veterinary behaviorist, or certified applied animal behaviorist.

### What techniques should be avoided in training?

An appropriate trainer should avoid any use of training tools that involve pain (choke chains, prong collars, or electronic shock collars), intimidation (squirting bottles, shaker noise cans, compressed air cans, shouting, staring, or forceful manipulation such as “alpha rolls” or “dominance downs”), physical correction techniques (leash jerking, physical force), or flooding (“exposure”). The learner must always feel safe and have the ability to “opt out” of training sessions. All efforts should be made to communicate effectively and respectfully with the learner.

### Why should aversive training techniques be avoided?

The consequences and fallout from aversive training methods have been proven and are well documented. These include increased anxiety and fear-related aggression, avoidance, and learned helplessness. Animals may be less motivated to engage in training and less likely to interact with human members of the household.

### How should a veterinarian decide who to refer to for training?

Veterinarians offering training referrals should recommend the most qualified and ethical trainers. The trainers should be certified, humane, and effective. Whenever possible, veterinarians should interview and observe a trainer’s methods before recommending them to clients. If a trainer is observed using aversive training methods or if a trainer discusses out-dated ideas such as...
“dominance”, “leader of the pack”, or “alpha” theories, then clients should be advised against hiring them.

Trainers with backgrounds in higher-level education such as the Karen Pryor Academy and Jean Donaldson’s Academy for Dog Trainers, as well as involvement in organizations such as the Pet Professional Guild, International Association of Animal Behavior Consultants, Victoria Stillwell’s Academy for Dog Training, and Fear-Free Certifications should be recommended whenever possible.

What is the role of the veterinarian in behavioral care?
Veterinarians are an important part of the training or behavior team. Incorporating behavior history and assessments in every patient visit encourages early intervention for problem behaviors. The veterinarian also plays an important role in evaluating the health of the animal to determine if there are medical factors contributing to the behavior concern. After the health evaluation the veterinarian can determine if they have the skills and desire to create a behavior treatment plan or if they prefer to partner with a behavior consultant or trainer. Veterinarians creating behavior treatment plans or partnering with other professionals for the treatment of behavior concerns should not consider the use of pharmaceuticals as a “last resort” for behavior problems. Open communication with board-certified veterinary behaviorists and members of AVSAB is encouraged.

Glossary of Terms
A glossary of training and behavior modification terms can be found on the AVSAB website at: http://avsab.org/glossary

Recommended Reading List
1. Decoding Your Dog (American College of Veterinary Behaviorists)
2. Decoding Your Cat (American College of Veterinary Behaviorists)
3. From Fearful to Fear Free (Dr. Marty Becker, Dr. Lisa Radosta, Dr. Wailani Sung, Mikkel Becker)
5. Puppy Start Right (Dr. Kenneth Martin and Debbie Martin)
6. The Power of Positive Dog Training (Pat Miller)
7. Don’t Shoot the Dog! (Karen Pryor)
8. How to Behave So Your Dog Behaves (Dr. Sophia Yin)
9. The Other End of the Leash (Patricia McConnell)
10. Control Unleashed: Reactive to Relaxed (Leslie McDevitt)
11. Animal Training: Successful Animal Management through Positive Reinforcement (Ken Ramirez)

Addressing Problem Behaviors Without the Use of Aversive Methods
Behavior modification plans should include science-based classical or operant

Physiologic Measures of Stress
Cortisol is the most commonly evaluated biomarker of stress in dogs. Interpreting cortisol studies can be difficult because cortisol levels increase with both positive and negative emotional arousal. Cortisol increases both with positive emotional states (eustress) and negative emotional states (distress). Therefore, interpretation of cortisol level can be difficult and should be done along with behavioral responses.

De Castro et al (2020) found that dogs trained using aversive methods trained using reward-based methods. This higher cortisol level correlated with more stress-related behaviors (lip-licking, yawning) and more time spent tense and panting during training in the aversive training group compared to the reward-based training group.

Effects on Dog-Human Relationship
Reward-based methods promote a strong, positive bond between dog and owner. Rooney and Cowan (2011) found dogs who were trained with aversive methods were less likely to interact with a stranger during relaxed social play. Dogs trained using physical punishment were also less likely to interact with their owner during play. Viera de Castro et al (2019) found that dogs who attended reward-based training schools played more in the presence of their owner than

In dogs with a history of off leash behavior problems, China et al (2020) found no difference in the proportion of disobeyed cues between dogs trained with electronic shock collars by manufacturer-nominated trainers compared with reward-based training. Dogs trained with reward-based methods in this study had a shorter delay before responding than the group trained with electronic shock collars.
conditioning protocols. There is no role for aversive training in behavior modification plans. Creating positive associations to stimuli perceived by the dog as frightening is essential in easing fear and anxiety. Teaching new skills can build confidence and provide the animal with alternative patterns of behavior that are more compatible with life in our homes and neighborhoods. Systematic desensitization (as opposed to flooding or exposure plans) involves very gradual exposure to the stimulus in a way that keeps the dog feeling safe at all times. Positive reinforcement of appropriate behavior helps the animal student learn while keeping them engaged in the process.

Management strategies, including antecedent arrangement, have a vital role in dog training and should be considered in all training and behavior modification plans. Medication may also be necessary for serious behavior problems such as fear, aggression, separation anxiety, noise phobia, or compulsive disorders. These individuals should always be evaluated by a veterinarian so that an accurate diagnosis and treatment plan can be made and medical conditions that may contribute to the problem can be excluded.

**Conclusion**

Based on current scientific evidence, AVSAB recommends that only reward-based training methods are used for all dog training, including the treatment of behavior problems. Aversive training methods have a damaging effect on both animal welfare and the human-animal bond. There is no evidence that aversive methods are more effective than reward-based methods in any context. AVSAB therefore advises that aversive methods should not be used in animal training or for the treatment of behavior disorders.

**REFERENCES**