

Reward Training vs. Discipline-Based Dog Training

Dog training using rewards versus discipline produces different outcomes.
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When you decide that you want to modify the behavior of your dog (or another human being) there is one fundamental decision that you must make—namely are you going to base your training methods on rewards, or punishments, or some combination of the two. So-called discipline-based training programs tend to use punishment as a major tool, taking away privileges, inflicting pain, or some other negative outcome, if the individual fails to behave in the desired manner. That's the way that governments work, fining you or jailing you if you do not behave as they want you to. For dogs, the punishment may be in the form of a leash jerk, shock from an electronic collar, or scolding, slapping etc. The alternative is reward-based training, where each desired behavior results in a good outcome, such as treats or praise, and erroneous behavior simply does not give you the desired reward.

Obviously we want to use the most effective form of training, so the question is which works better, and produces the best outcome, reward-based training (so-called positive training) or discipline and punishment based training. There are several ways that this question can be addressed, however I am going to deal with only one possible answer.



When we are talking about learning, we are actually talking about some form of relatively permanent change in behavior that comes about because of an individual's experiences in the world. More than 200 years ago the philosopher John Locke described learning as forming an association, which is actually a mental connection between events that occur in some sequence. Most people understand this as learning an association between an action and its outcome, such as learning that clicking a wall switch turns on the room light, while sticking your finger in the electrical outlet produces a painful shock.

There is however a form of learning which the average person either does not know about, or seldom thinks about, called "classical conditioning". However it is a very important and fundamental form of learning through which associations are formed between events occurring in the real world and reflexes or emotional responses in the individual. The word "conditioning" is just psychological jargon for learning, and "classical" is applied because it was the first form of learning to be that was scientifically studied.

Classical conditioning was first systematically studied by Ivan Petrovich Pavlov, a Russian physiologist. His research on this topic started with a casual observation. He was studying the salivary secretions in dogs and knew that when he put food in an animal's mouth it would always salivate. He also observed that when he worked with the same dog on several occasions, the dog would begin to salivate when it observed things associated with food, such as the food dish or even the sight of the person who normally brought him food. Pavlov recognized that the dog's response showed a special form of learning because it involved a response that can't be controlled voluntarily. For example, if I would say to you, "Make your mouth water," you would find it virtually impossible to set up a constant flow of saliva simply by willing it. Pavlov realized that something special had occurred: An involuntary action (salivation) that is usually triggered only by a certain class of events (food) was now being controlled by a new stimulus (the sight of the experimenter).

Pavlov studied this process using a simple procedure. During training he presented a neutral stimulus (one that doesn't cause the dog to salivate) such as the sound of a bell, immediately before he puffed a bit of meat powder into the dog's mouth to trigger salivation. A few repetitions of the sequence "ring-puff-slobber" would then be followed by a test with just the sound of bell. Sure enough, the bell, which originally had no effect on the dog, would now cause it to salivate. What the neutral stimulus was made no difference; it could be a click, a light, a drawing of a circle, a touch on the rump, or anything else. The important thing was that now the dog was responding to it as if that stimulus was the meat powder-by salivating. The dog doesn't have to want this happen, or participate actively in the learning process, it will just happen on its own.

Why should we care about training our dogs to drool on cue, when many of us are already bothered by the amount of drooling that they do naturally? The truth of the matter is that we are not interested in drooling the real importance of classical conditioning is that it is the way which we learn to attach emotional responses to things. All we need is to have a sequence where we encounter a stimulus, which is followed by an event which triggers an emotion. A few repetitions of "stimulus-event-emotion" will soon have the stimulus itself trigger the emotion because of classical conditioning.

The most famous example of how classical conditioning can produce learned emotional responses was provided by John Watson who conducted an experiment that would never make it past the ethical review panel in any of today's research institutions. He took an 11-month-old baby, named Albert, and showed him a white rat. Albert demonstrated no fear of it at all. Next Watson showed Albert the rat and at the same time had someone bang two metal rods together to cause a loud clanging sound. This startled Albert, frightened him, and caused him to cry. After a few repetitions of this sequence of "rat-clang-fearful cry," just the sight of the white rat would cause him to cry and try to crawl away. He not only acted afraid of the rat, but now Albert seemed to be afraid of any furry objects, including white rabbits, stuffed toys, fur coats and even a Santa Claus beard. Watson concluded that he had classically conditioned the emotion of fear, and attached this emotion to white furry objects in Albert's mind. Notice that Albert did not have to want to learn, or actively participate in trying to learn this fearfulness, it happened automatically simply due to association of the stimuli with something that triggered his emotional response.

Classical conditioning of emotions provides one reason why reward-based training procedures should work better and establish a stronger bond between the dog and his trainer, than punishment based systems. Every time you give the dog a treat, or some other reward, you set up the event sequence "sight of you-treat-pleasant feeling." Even if your timing is off and you are not a very good and knowledgeable trainer, there is no harm being done in this case. Every instance of reward makes it more likely that the dog will feel better about you because you are actually conditioning the emotional response "sight of you-pleasant feeling."

The flip side of this coin is the use of punishment or harsh corrections. The sight of you, or your hand, or the training leash and collar immediately followed by pain or discomfort will ultimately come to be associated with negative feelings and avoidance. This was demonstrated to me when I visited a facility that trained protection dogs. The technique that the trainer was using was rather harsh and punitive, the idea being that dog should ultimately develop a distrust and antipathy for any strangers. This was accomplished by presenting the dog with a series of negative encounters with people he did not know, in order to classically condition the dog's aggressive feelings toward anyone with whom he was unfamiliar. However I also noticed that when the trainers approached the dogs' kennels with the training collar in their hand, the dogs would retreat to the far wall and try to avoid having the collar put over their head. Clearly the trainers and the entire training scenario had come to be conditioned to produce unpleasant feelings.

As I looked at these behaviors I could not help but think of my own dogs, who have been reward-trained (perhaps to excess), and who dance merrily around me and mill in front of the door with tails batting and eyes full of eagerness when they see me pick up the bag that contains their training gear or when I reach for their leashes. My dogs may not be the best trained nor the most perfect performers in the obedience ring, but they do their exercises with joy, because their numerous rewards and classical conditioning have caused everything associated with their training to produce positive feelings.