

Effects of a preadoption pamphlet on the success of canine adoption

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Introduction

In the United States there are approximately 78.2 million owned dogs, and 39% of households have at least one dog (Humane society of the United States [HSUS], 2011). Unfortunately, not all of these pets will be retained in their household for the remainder of their lives. There are 6-8 million dogs and cats entering animal shelters every year (HSUS, 2009), but shelters do not have the resources to properly care for all of these animals. As a result of resource shortages, 3-4 million animals are euthanized every year (HSUS, 2009). That is one dog or cat every eight seconds.

Millions of dogs and cats are relinquished to animal shelters by their owners every year (Salman, et al., 2000). The most common cause of owner surrender to a shelter is behavioral issues (Diesel, et al., 2010). More than 50% of owners relinquishing their pet to an animal shelter reported issues with the dogs' behavior (National Council on Pet Population Study and Policy, 2001). Behavior issues in canines are often times preventable, but can arise or are not resolved because owners are not presented with enough consistent and scientific-based advice on dog behavior and training (Malamed, 2011).

There are many theories on the most effective and superior method of dog training. Traditional methods focus mainly on positive punishment (introducing an unwanted or feared stimulus to dogs when they exhibit unwanted behavior) and negative reinforcement (removing the unwanted or feared stimulus when the dogs stops the unwanted behavior) (Lieberman, 1999). Positive punishment and negative reinforcement are based mainly on the dominance theory, which is the social theory applied to wolves (American Veterinary Society of Animal Behavior [AVSAB], 2008). The dominance theory suggests that the relationship between an owner and their dog is established by who is dominant over whom. This is a relationship where hierarchy is set through force and submission to determine which member has the priority to resources, like food, resting spots, and mates (Bernstein, 1981; Drews, 1993). There are several flaws when comparing wolves' social hierarchy to companion dog social behavior, the biggest being that companion dogs have evolved differently from wolves for the past 15,000 years (AVSAB, 2008). Dogs have evolved as scavengers rather than hunters so they do not form packs, and they generally have the opportunity to have many mates, eliminating the need for dominance for resource attainment (AVSAB, 2008). In fact, even free-ranging dogs in Romania, South America, India, and Mexico have not formed packs, but instead they have brief meetings for mating or food (Donaldson, 2009). Also unlike wolves, wild dogs do not hunt together and the males are not present for pup-rearing (Donaldson, 2009). Because even canines in the wild do not conform to the social norms

of wolf behavior, domesticated dogs need to be trained in a way that coincides with domesticated dog behavior, not wolf behavior.

Basing training off of the dominance theory often means incorporating aversive training methods into the process. This can include leash corrections with prong or pinch collars, electric shock collars, yelling, hitting, and alpha rolling (where the owner forcibly rolls the dog into a submissive position) (Herron, et al., 2009). Results of modern companion animal behavior research have consistently suggested that these techniques are not the most effective and safe method of training. In one study, owners reported that using aversive techniques that physically manipulated their dog resulted in an aggressive reaction from the dog (Herron, et al. 2009). Dogs trained solely by positive reinforcement show the lowest occurrences of aggression, attention seeking, and fear (Blackwell, et al. 2007). They also exhibit less overexcitement and better leash walking obedience (Hiby, et al. 2004). Dogs that have been punished for unwanted behavior show more reactions towards dogs outside of the house (Blackwell, et al. 2007) and show more separation anxiety problems (Hiby, et al. 2004). In a survey of 326 participants, owners that only used positive reinforcement reported the lowest number of behavior problems, while owners that used only punishment based methods reported the highest number of behavior problems (Hiby, et al. 2004).

Problem Identification and Justification

Although considerable research has been conducted on the effect of various types of training on a dog's behavior, much of population still uses outdated forms of training. These outdated methods can lead to behavioral problems, which can lead to relinquishment and the possibility of euthanasia of the dog.

Recent research conducted at The Ohio State University studied the effects of preadoption counseling on house-training (Herron, et al., 2007). Of the owners that received preadoption counseling, 98.1% considered their dogs successfully house-trained after 1 month, and of the owners that did not receive preadoption counseling, only 86.4% considered their dogs successfully house-trained (Herron et al., 2007) These promising results suggest that owners do listen to preadoption counseling, and incorrect house-training techniques are often times a result of ignorance of the scientifically based methods for house training. The proposed research will help determine if new dog owners are also willing to read and embrace suggested methods for training their new pets in basic obedience. It is essential to find a way to educate the public on the proper way to train dogs. The wide variety of training programs can be confusing, especially since most present themselves as knowledgeable in animal behavior and certified in various dog training courses (Franks, D. 2011; Ferguson, S.H. 2011, Millan, C. 2006).

Since 50% of owners who relinquish their dog for behavioral reasons originally rescued that pet from an animal shelter (Salman, et al., 2000), and the number of behavioral issues a dog displays is significantly higher if the dog was acquired from a shelter (Blackwell, 2008), it is even more

important to inform owners who are adopting dogs from a shelter about these training techniques.

Hypothesis and/or Objectives

The goal of this study was to determine the effects of a pamphlet emphasizing the importance of positive reinforcement on the success of the dog adoption. I predicted that the owners who received the pamphlet promoting the use of positive reinforcement would be more likely to use appropriate training methods and less likely to use aversive methods.

Procedures and Methods

Participant recruiting began in March 2012 and continued until the study had obtained 150 participants. Owners adopting a dog were asked to participate in a study conducted by The Ohio State University that included a survey 3 months after adoption. All participants received a free toy from Premier Pet Products, a canine product company that donated products for this research project. Participants signed a consent form and gave contact information.

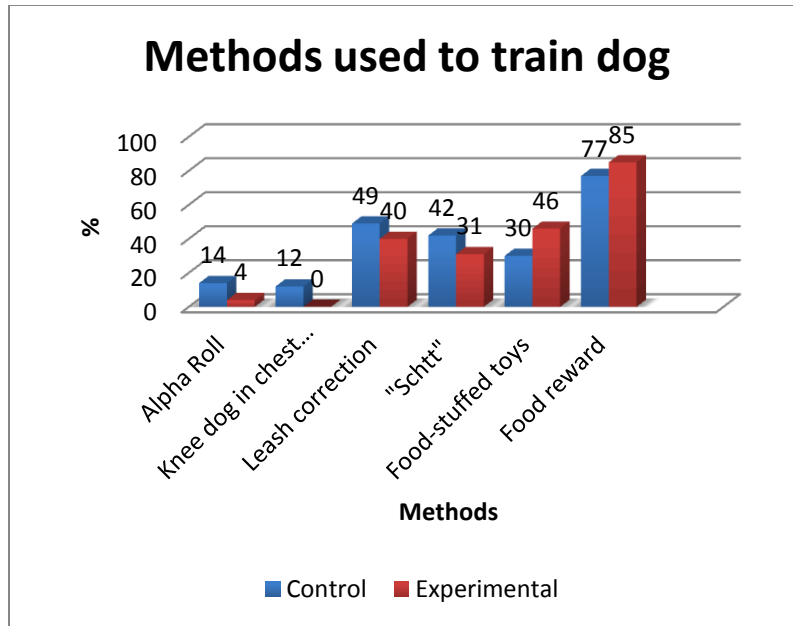
Participants were placed into two groups: those receiving the pamphlet and those not receiving the pamphlet. Group designations were determined by blocked randomization to prevent imbalance. The pamphlet was a double sided sheet that explained the importance of employing positive reinforcement with examples and explanations. It was based on scientific research, and provided clear instructions on which dog training methods to use and how to choose an appropriate dog trainer. The pamphlet employed the Appeal to Fear persuasive technique. To do this, the pamphlet showed the participants their susceptibility to the dangers of the traditional training methods and the severity of the problems associated with aversive training methods. It offered a more effective alternative to the issue. The pamphlet tried to produce response-efficacy, such that the readers believed that the suggested methods would be effective. It also tried to produce self-efficacy, such that the owners believed that they were competent enough to successfully use the alternative methods.

Participants were contacted 3 months after adoption via email with a survey.

The X^2 method was used to determine the statistical significance of the results. A value of $P < 0.05$ was considered significant.

Results

Data analysis focused on the methods that participants used to train their pets. Although numerical differences were found, data remained largely insignificant ($P > 0.05$). The only training method found to be significant was kneeling the dog in the chest to correct jumping ($P = 0.049$).



Selected methods used based on percentage

Training method	Control Group %	Experimental %	P Value
Alpha Roll	13.95	4.17	0.2026
Knee dog in chest for jumping	11.63	0	0.0489
Gentle leader	34.63	18.75	0.1323
Leash Correction	48.84	39.58	0.4984
Spray dog in face with water	11.63	8.33	0.8613
Yell "schtt"	41.86	32.25	0.4000

Selected methods used and corresponding p value

Discussion

The results suggest that the pamphlet did not have a significant impact on dog owners' choice of training methods. Results may be due to the high volume of information owners receive upon

adopting their dog. The Franklin County Dog Shelter provides owners with medical documents, registration documents, and coupons for the gift shop. All of this information may have decreased the amount of notice given to the pamphlet. Results may also be due to the limited sample size since a limited number of recruited participants completed the survey.

The ineffectiveness of the pamphlet could also be a result of outside sources that owners are exposed to more often than reading a single leaflet. The pamphlet encouraged owners to take their pets to dog training classes that involved only positive reinforcement. However, *Blackwell, et al.* (2007) found that 58% of owners choose to train their dogs at home rather than an instructed class. They can get their sources from books, the Internet, and television. One of the most popular dog training programs on television is *The Dog Whisperer*, on the National Geographic Channel. An estimated 11 million people tune into the show (Wallace, 2009), which follows dog trainer, Cesar Milan, on cases of dogs with extreme behavior problems. Experts have spoken out against the dominance based pack theory that Millan uses to “train dogs and rehabilitate people” (Millan, 2006) because his theories have no basis in the current scientific knowledge of animal learning (Hetts, 2009). His main approach to training animals is through aversive techniques such as jerking a leash, kicking, restraint, and flooding. These techniques are applied inconsistently and often cause the dogs to shut-down or respond aggressively (Bradley, 2009). The popularity of the show and the numerous other resources promoting similar methods might have counteracted the influence of the pamphlet.

Despite the fact that the American Behavior Society, the Animal Society for the Prevention of Cruelty to Animals, and the American Veterinary Society of Animal Behavior promote the use of reward based training instead of traditional methods, 70.2% of owners still incorporate these traditional methods into their training (Hiby, et al. 2004). This disconnect between the scientific community and everyday dog owners underlines the importance of conducting more research to find an effective and inexpensive method of educating owners on appropriate training methods.

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