Examination of the Accuracy and Applicability of Information in Popular Books on Dog Training

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Abstract

There is a wealth of popular literature available on dog behavior and training; sourcing reliable and trustworthy advice is important to achieving successful training. The aim of this study was to select five best-selling (at that time) dog training books, and review their general content and references to basic learning theory and human communicative cues. An Internet search was performed on three online bookstores’ websites for “best selling” “dog training” books. The books were by Millan and Peltier (2006), Fennell (2002), Stilwell (2005), Pryor (1999), and Monks of New Skete (2002). The results showed marked differences across all books, including inconsistencies in the depth of information provided, and some starkly contrasting training methods were advocated. Overall, these books were not all considered to function as instructional manuals. The persistent popularity of these books suggests that they have likely contributed appreciably to the type of information accessed by dog guardians.

Keywords
books; dog; punishment; reinforcement; review; training; welfare
Introduction

The provision and accessibility of sound dog training advice is important. Undesirable dog behaviors (e.g., aggression, hyperactivity, destructive behavior) increase the likelihood of people relinquishing their dogs and most dogs taken to animal shelters are surrendered because of perceived behavioral problems (Diesel, Brodbelt, & Pfeiffer, 2010; Patronek, Glickman, Beck, & McCabe, 1996; Wells & Hepper, 2000). Dogs face an uncertain future once at a shelter facility: some will be successfully re-homed, those in no-kill shelters might remain there for the rest of their lives, and in some Western countries approximately one third of shelter dogs are likely to be euthanized (Marston & Bennett, 2003; Patronek, Glickman, & Moyer, 1995).

Some research suggests a link between dog training and a lower incidence of behavioral problems. Kobelt, Hemsworth, Barnett, and Coleman (2003) found that dogs who received obedience training were more likely to obey commands than untrained dogs, and that obeying commands was negatively correlated with the occurrence of behavior problems. People who have undertaken some form of training with their dogs report that their dogs are less disobedient and participation in training activities, including discussing training and reading books, is associated with a lower frequency of certain dog behavior problems (Arhant, Bubna-Littitz, Bartels, Futschik, & Troxler, 2010; Bennett & Rohlf, 2007; Jagoe & Serpell, 1996). Thus, if people’s training attempts are more successful, fewer dogs may be relinquished. Guardians do not always attend dog training classes, and they often seek information about dog training from books, the internet, and friends and family (Bennett & Rohlf, 2007; Shore, Burdsal, & Douglas, 2008). Such sources are easily-accessed and (frequently) free, thus the quality of information provided by such sources is of interest.

Dogs are trained to perform various tasks through the application of learning principles, namely classical and operant conditioning, whether the trainer is aware of this or not. Surveys have found that most companion dog guardians describe using operant training techniques involving both positive and negative reinforcement and positive and negative punishment, such as giving food, verbal praise, physical manipulation into a position, “time out”, verbal reprimands, and smacking (Arhant et al., 2010; Blackwell, Twells, Seawright, & Casey, 2008; Hiby, Rooney, & Bradshaw, 2004; Rooney & Cowan, 2011). Some studies have found an association between people reportedly using only positive reinforcement training methods and a lower incidence of reported dog behavior problems (Blackwell et al., 2008; Hiby et al., 2004). In addition, the frequency with which people use punishment-based methods has been positively correlated...
with the number of behavior problems their dogs have (Hiby et al., 2004), and higher rates of aggression
have been found in dogs whose guardians use a mixture of reinforcement and punishment (Blackwell et al.,
2008). It is, however, important to note that these relationships have not been determined to be causal – dogs
that do not display problem behaviors may simply not attract punishment and vice versa. Many dog
 guardians have no formal training in behavioral science, thus it is important that learning principles are
presented to them so that their relevance and application are clear in order to maximize training efficacy.
Scientific research has examined various aspects of human-dog communication and dogs have been
found to be highly responsive to human behaviors. A study by Call, Bräuer, Kaminski, and Tomasello (2003)
found that dogs were significantly less likely to take a forbidden piece of food when a person was watching
them compared to when the person was out of the room, turned their back, was distracted or had their eyes
closed. Similarly, dogs obey commands better when they are the focus of humans’ attention, compared to
when people are directing their attention elsewhere or are out of sight (Schwab & Huber, 2006; Viranyi,
Topál, Gácsi, Miklósi, & Csányi, 2004). Dogs have shown an ability to follow human pointing gestures in
numerous object-choice experiments (e.g., Dorey, Udell, & Wynne, 2010; Gácsi, McGreevy, Edina, &
More subtle human gestures, such as nodding, head-turning and gazing, can also be used by dogs as cues to
indicate food or toy location (Ittyerah & Gaunet, 2009; Miklósi et al., 1998; Soproni et al., 2001).
Dogs’
responses to these gestures suggest some comprehension of the referential nature of these cues. Dogs are also
sensitive to verbal communication. Small changes to a command word (e.g., “sit” being altered to “CHit”
and “siK”) can result in significant decreases in dogs’ performances (Fukuzawa, Mills, & Cooper, 2005), and
presenting a novel word prior to a command can reduce dogs’ responses to known and newly-learned
commands (Braem & Mills, 2010). Despite the fact that individual dogs’ success rates often vary in these
studies, the overriding conclusion is that dogs are very responsive to human communicative cues. Because of
this, it is reasonable to assume that such cues may have some impact during the dog training process. Thus,
people may benefit from advice on how and when to use such cues during dog training.
The purpose of this study was to select a sample of best-selling English-language dog training books
and examine their content with particular regard to learning theory and human-given cues. The aim was to
evaluate the accuracy and level of detail of the information given, and to compare the books with each other.
Method

Book Selection

An Internet search was performed in August 2009 for dog training books on three major online bookstores’ websites: Amazon United Kingdom, www.amazon.co.uk; Amazon United States, www.amazon.com; and Fishpond New Zealand, www.fishpond.co.nz. The search term “dog training” was entered, and the resulting books were sorted by “best selling” from highest to lowest.

Five books were selected for review. These books appeared the most frequently within the top 10 listed books across all three websites. If any books appeared with equal frequency, the number of other listed books by the same authors was taken into account when making the selection; i.e. books whose author also had another book in the top 10 were chosen. Books dedicated specifically to puppy- and trick-training were discounted from selection.

The books selected were (in order of descending popularity):


Amazon.com was selected due to its global popularity; amazon.uk was chosen as another leading retailer in an English-speaking country in which dogs are held in high regard; and fishpond.co.nz was included as a major store in the authors' own country.
Although this search was originally conducted in 2009, it was replicated again in 2012 and results showed that these same books remained listed in the top 11 best-selling books. In 2014 a similar search was also performed (Amazon United States changed its website’s search criteria slightly and so books from that website were ordered by “relevance”), showing that these titles featured in the top 20 listed books on these websites (as well as several other titles by these same authors). The ongoing popularity of these books suggests a noteworthy measure of influence, and that this study remains relevant and these books continue to provide a good representation of the information accessed by dog guardians in recent years.

**Review Procedure**

Each book was read entirely, at least twice. The general content of each book and the authors’ approach to training was evaluated and summarized.

Elementary aspects of learning theory (particularly operant conditioning) taken from scientific literature and deemed to be particularly relevant to basic dog training were searched for. The books were examined for explanations of reinforcement and punishment, including how accurately these concepts were described. Definitions and examples of these concepts are in Table 1; descriptions falling within the scope of these definitions were considered accurate. If the authors advocated using positive and/or negative reinforcement and/or punishment, their descriptions of when or how to do this were noted, as were references to the timing of reinforcement, punishment, or commands. This information was tabulated to enable comparisons across the books. Use of classical conditioning was also recorded.

The books were also examined for references to particular human-given cues, which were selected based on human-dog communication scientific literature (e.g., Fukuzawa et al., 2005; Miklósi et al., 1998; Schwab & Huber, 2006; Soproni et al., 2001): eye contact, head or body orientation, proximity, body position, hand or arm gestures, tone of voice, volume of voice, and pronunciation. For example: “Dogs respond really well to vocal tone and pitch” (Stilwell, 2005, p. 68); and “The dog's extreme sensitivity to movement means that hand signals and gestures are often much more useful in training than spoken commands, especially if you are working at a distance” (Stilwell, 2005, p. 24). Each mention of advice on the use of these cues was recorded and this information was summarized.

This information was documented when it was used in discussion of dog training in general terms and when mentioned in relation to three tasks: “sit”, “down”, and “come”. These tasks are commonly trained
and employed by dog guardians, and as such clear explanations on how to train these tasks would be useful.

Thus, it may be expected that instructions on training these tasks would be included in dog training books.

The first author recorded the information based on definitions provided in academic literature. In order to ensure reliability, any occurrences that were unclear were discussed with the coauthors to achieve a consensus; only clear instances of these constructs were included.

Results


Millan’s and Peltier’s (2006) book, Cesar's way: The natural, everyday guide to understanding and correcting common dog problems, is a guide to how Millan believes people should communicate with their dogs. Millan is a self-taught dog trainer who achieved international prominence with his United States television series Dog Whisperer; and this book is almost as much of an autobiography as it is about dog behavior and training. The authors do not claim this book to be a training manual per se, but rather, its aim is to “help you understand your dog’s psychology better” (Millan & Peltier, 2006, p. 197). The concept of dominance, and that people should act as “pack leaders”, is a constant theme throughout this book. The authors’ definition of a pack and the roles within it, however, are at times contradictory. For example, at different points throughout this book it is stated that a pack has only two roles (“leader” and “follower”), that there are varying levels of status within a pack, and that all human household members should be a dog’s leader.

Positive reinforcement is discussed sometimes in this book, but it is not defined clearly (Table 2).

Millan and Peltier talk about “corrections” in some detail, however this term may be more accurately described as positive punishment as the goal of corrections appears to be to stop unwanted behaviors. For example: “If you send them to another room or put them outside, they probably won’t make the connection between the banishment and the bad behavior ... Corrections have to happen in the now – and be repeated
every time the rule is broken – before a dog will understand what aspects of her behavior are unwanted by you” (Millan & Peltier, 2006, p. 217). And: “When I have a dog on a leash, I’ll give a little tug upward to snap the dog out of unwanted behavior” (Millan & Peltier, 2006, p. 219). The methods for changing unwanted behavior in this book tend to rely on the use of aversive stimuli, such as jerking on the lead. It’s explained that the timing of corrections is important, and that they should be delivered at the instant the undesired behavior occurs (Table 2).

Millan and Peltier describe in broad terms how “energy”, a “language of emotion” (Millan & Peltier, 2006, p. 66), is the main form of human-dog communication. Human-given cues are referred to, particularly eye contact and volume of voice, but “projecting” the correct form of energy is the method of communication underscored in this book (Table 3). For example: “... [at the dog park] you should be on the alert, not standing in one place, but moving around the park and constantly connecting with your dog through calm-assertive voice, eye contact, and energy” (Millan & Peltier, 2006, p. 254).

The authors clearly state this book “isn’t a “how-to” manual” (Millan & Peltier, 2006, p. 197), but rather it is focused on teaching people how to understand their dogs’ behavior; and as such, no instructions are provided on how to train basic behaviors such as sit (Tables 4 and 5).

The Dog Listener: Learning the Language of Your Best Friend

The author of The dog listener: Learning the language of your best friend, Fennell (2002), also featured in a well-known United Kingdom television series, The Dog Listener. Fennell developed her training philosophy through observing her own dogs and watching videos of wild canids, particularly wolves. She adheres strongly to the notion of wolves and dogs having a hierarchical social structure, and this is reflected in how she thinks dogs and people should interact. Many training situations and behavior problems are covered in this book, during which constant comparisons are made between dog and wolf behavior and the “leadership” role of people is emphasized. Anthropomorphisms, such as attributing feelings of responsibility to dogs, are common throughout this book. For example: “The dog felt that he was responsible and did not want her [the
guardian] to go out into a world he felt she did not understand; an Alpha, by definition of its status, knows best” (Fennell, 2002, p. 106).

Fennell does not explain learning principles or use much learning terminology, but provides many examples of positive reinforcement and several of punishment (Table 2). She makes frequent reference to “making positive associations” and “rewarding” dogs for desirable behavior. The author recommends the use of negative punishment such as removing food and time outs as consequences for undesirable behavior, although they are not described as punishment (and in one case, the author states that removing the dog from a room for unwanted behavior should not be perceived as punishment). Timing of positive reinforcement is mentioned, with the clearest instructions being that positive reinforcement should be delivered as the dog’s rump touches the ground (when teaching sit), and “the second the dog comes” (Fennell, 2002, p. 81) (Table 2). In reference to toilet training, it’s explained that delayed positive punishment is ineffective. In teaching a dog to sit, readers are instructed to give the command with the food, after the dog has performed the behavior (Table 4).

This book emphasizes being calm when communicating with dogs. Fennell advocates ignoring dogs in certain situations (e.g., when reuniting) and specifies that a lack of eye contact, touch, and verbalizations are important when doing this (Table 3). For example: “The key to this then is that the dog must not be engaged with in any way. By this I mean no eye contact, no conversation, no touching unless it is to gently push the dog away” (Fennell, 2002, p. 77).

Fennell advises luring and giving “rewards” to dogs when teaching basic obedience tasks, but the level of detail provided in the instructions is variable and they are not always detailed enough to be replicated easily by a reader (Tables 4 and 5).

**It’s Me or the Dog: How to Have the Perfect Pet**

*It’s me or the dog: How to have the perfect pet* by Stilwell (2005), accompanied the author’s popular United Kingdom television series of the same name. Stilwell’s background with dogs is based on practical experience: working as a dog walker, with shelter dogs, and running a dog training school. Her television program focused on dogs who are challenging to train or that have behavior problems. This book covers a wide range of topics from how to communicate with dogs, to recommended dog food, to teaching dogs tricks.
Aspects of operant and classical conditioning are described in this book, although classical conditioning in particular is not explained in much depth (Table 2). The author claims that all of her training methods are “positive”; however, she does advocate the use of “corrections” (punishments) such as verbal reprimands and time outs for when dogs do not respond to commands or are displaying unwanted behavior. Timing of positive reinforcement and corrections is emphasized as being important, with the author maintaining that feedback should be delivered within one second of the dog’s response (Table 2).

This book stresses the importance of effective communication between dogs and people, and gives specific directions on how guardians should use their voice and body language during training (Table 3). For example: “Vary your body positions. The dog should respond when you are sitting, crouching or standing, not just when you are standing and facing him” (Stilwell, 2005, p. 76).

Step-by-step instructions are provided for teaching a selection of behaviors, including how and when to use positive reinforcement (the form of operant conditioning most-frequently recommended) (Tables 4 and 5).

**Don't Shoot the Dog! The New Art of Teaching and Training**

Pryor’s (1999) book, *Don’t shoot the dog! The new art of teaching and training*, explains the broad principles of learning and their application in training situations. The author has years of experience in the field of non-human animal training, particularly clicker training.

Despite its somewhat-misleading title, this book discusses methods of teaching and modifying behavior in any species, including humans, and is not specific to dogs. There is a strong emphasis on the application of positive reinforcement to train new behaviors and modify existing ones (Table 2). Pryor describes shaping techniques in detail, establishing stimulus control, and how to get rid of undesirable behaviors. The importance of timing of positive reinforcement is highlighted, with the author stating it should be delivered in conjunction with the behavior in question, and that reinforcing too early or too late is ineffective (Table 2). These concepts are not described solely in the context of dog training.

This book is a guide to the training of any animal, and so unsurprisingly it contains little mention of human-dog communication with regards to human-given cues, and does not explicitly describe how to train dogs to perform specific behaviors (Tables 3, 4, and 5). For example, reference is made to teaching a dog to sit, but it is in the context of establishing stimulus control and describing when to introduce the verbal
command; the use of a hand signal, body position, and pronunciation is mentioned with no explicit
instructions (Table 3): “You can make the cue very broad: add a hand signal, body English, speak very
clearly” (Pryor, 1999, p. 72). This book had no explanation on how to teach a dog down, and a brief
reference to using a hand signal when training come: “We are essentially using targeting when we slap our
thighs to coax a dog to us. The movement seems to attract dogs, and when they approach, we reinforce the
behavior with petting” (Pryor, 1999, p. 58).

How to be Your Dog’s Best Friend: The Classic Training Manual for Dog Owners

The authors of How to be your dog’s best friend (Monks of New Skete, 2002) have been training and
breeding dogs for over 30 years in their monastery in the United States. This book, first published in 1978,
covers an extensive range of topics from puppy selection to the death of a dog. The authors place emphasis
on having a good dog-guardian relationship, and advocate that good communication and training contribute
to this. They also think that humans should take a leadership, or “alpha”, role in this relationship.

The use of positive reinforcement and punishment are discussed frequently throughout this book (Table 2). The authors, whilst acknowledging the behavioral definitions of the terms positive and negative reinforcement and punishment (albeit with cursory explanations), proceed to assign their own labels to them. For example, the authors use the word correction to describe “light discipline” (Monks of New Skete, 2002, p. 68) such as verbal reprimands and jerking on the lead, and “punishment” to describe “more forceful verbal and physical discipline” (Monks of New Skete, 2002, p. 68) such as shaking or hitting. They advocate that the least amount of force necessary should always be used: “Build on your corrections, making them progressively tougher until your dog responds appropriately. Above all, watch your dog: his response will tell you whether the correction is too soft or too stern. Once you’ve obtained a consistent type of response, stick to that level” (Monks of New Skete, 2002, p. 70). Timing of positive reinforcement and positive punishment are mentioned regularly in this book; some of these instructions indicate giving rapid feedback, others are less specific (Table 2).

Human-given cues such as eye contact, specific body positions, and using particular tones of voice, are discussed frequently in this book. Such cues are mentioned in the context of communicating effectively with dogs, and in specific training situations (Tables 3, 4, and 5). For example: “Make eye contact and give a quick shake as you scold” (Monks of New Skete, 2002, p. 72). And: “Call the puppy in a light, happy tone of
voice, and when the puppy comes to you, praise her exuberantly ... You should be on your knees when you call the pup. Your arms should be open wide, to help “funnel” the pup toward you” (Monks of New Skete, 2002, p. 196).

Detailed, replicable instructions on how to teach basic commands are given, accompanied by illustrative photographs. Some of the methods recommended in this book include physical manipulation of dogs into the sit or down positions (e.g., putting pressure on a dog’s back during down training), with the application of positive reinforcement or punishment, depending on the success of the exercise (Tables 4 and 5). The authors recommend using particular physical cues when teaching a dog to come (Table 5).

**Discussion**

**General Content**

The books examined in this study differed in their overall focus and content. This study compared the information contained in books found as a result of an online search for “dog training” books. A limitation of this research was that the key words may not necessarily reflect the authors’ intention for how the book should be used. For instance, neither Millan and Peltier (2006) nor Pryor (1999) claimed that their books were dog training manuals by definition. Millan’s and Peltier’s (2006) book was aimed at teaching people how to understand and communicate with their dogs using Millan’s concept of energy, as well as how to modify undesirable behavior through his correction (positive punishment) techniques. Bearing this in mind, this book’s usefulness as a general dog training text is, understandably, questionable. The aim of Pryor’s (1999) book appeared to be explaining learning principles and their practical application to any species rather than being a dog training manual per se, and as such a lack of dog-specific advice or examples was to be expected. Nonetheless, these books were examined because they were listed as best-selling books found using the key words “dog training”, and thus purchasers of these books may have anticipated dog-specific, training advice.

Fennell’s (2002) book expounded her theory on pack hierarchy and leadership, and contained many examples of the application of this theory seemingly changing dogs’ behavior. The constant reference to leadership theory could cause people to overlook basic learned causes of behavior problems; and the frequent anthropomorphisms may be problematic in helping people objectively assess their dogs’ behavior. Indeed,
unsubstantiated or incorrect assumptions are often made about dogs’ emotional capacity (e.g., dogs looking “guilty”, Horowitz, 2009), and this can contribute to behavior problems (Bradshaw & Casey, 2007).

Stilwell (2005) and The Monks of New Skete (2002) took a more holistic approach to their books, including information on topics from dog food to dog deaths. Both books emphasized human-dog communication, and provided detailed training instructions that could be applied readily by guardians. Their overall training methods, however, were in stark contrast to each other: Stilwell (2005) emphasized positive reinforcement with the use of minor punishers (e.g., “ah ah ... a harsh, guttural sound”; p. 75), and luring techniques for training basic tasks; whereas The Monks of New Skete (2002) readily recommended positive punishment, some arguably harsh (e.g., “How hard do you hit the dog? A good general rule is that if you did not get a response, a yelp or other sign, after the first hit, it wasn’t hard enough”; p. 75), and physical manipulation during training.

Learning Theory

Terminology

Some authors demonstrated a preference for non-behavioral terminology, and instead assigned their own labels to the concepts. Millan & Peltier (2006), Stilwell (2005), and The Monks of New Skete (2002) used the word correction to mean forms of punishment. Stilwell states that “a correction is not a punishment” (Stilwell, 2005, p. 75). Although the corrections this author refers to (verbal reprimands and time outs) may be formally classed as punishers when they reduce the problem behavior (e.g., Catania, 1998), they do not cause physical pain to the dog. Training using these techniques and not advocating the use of electric shock and pain is often termed as positive. The term reward was used by all authors with the exception of Pryor (1999).

People don’t necessarily need to know the scientific terminology for behavioral terms in order to train their dogs successfully. However, terms such as “positive reinforcement” have become popularized, particularly with the advent of dog training television series (such as those featuring some of these authors). Inconsistencies surrounding both the use and meaning of such behavioral terms could lead to confusion.
There were inconsistencies between the explanations of learning theory across books. Some authors defined
these concepts in the same manner as they are operationally defined in academic literature, whereas other
explanations were cursory.

Pryor’s (1999) book provided the most comprehensive explanation of learning principles, focusing
extensively on the theory and applications of positive reinforcement. Millan & Peltier (2006), Fennell
(2002), and Stilwell (2005) all omitted explanations of either reinforcement or punishment (or both, in the
case of Fennell’s book), despite citing examples of both training methods throughout their texts. Whilst the
Monks of New Skete (2002) state that the lowest level of positive punishment that obtains the desired effect
should be used, their advice on progressively increasing the intensity of the punishment contrasts with that
given in scientific literature. Experimental evidence has shown that when positive punishment is introduced
at mild levels and gradually increased, animals can habituate to the punishment and continue responding
despite what eventually become relatively high levels of punishment; whereas if those same high levels of
punishment are introduced from the onset, the behavior often ceases (Mazur, 2001; Schwartz, Wasserman, &
Robbins, 2002). Thus from a perspective of efficaciousness and animal welfare it could be said that if
positive punishment is to be used, it should be introduced at a high intensity from the onset as this will be
most effective and require fewer punishments. Many dog guardians are not familiar with learning theory, and
accurate descriptions and explanations are likely to provide a greater understanding of them. This in turn,
may allow people to make better-informed decisions about when to apply these methods.

When to deliver positive and/or negative reinforcement and/or punishment was covered by all
authors, but the advice was not consistent. Stilwell (2005) and Pryor (1999) gave precise, replicable
instructions regarding timing of positive reinforcement: within one second of the desired behavior, and in
conjunction with the desired behavior, respectively. Millan & Peltier (2006) gave clear directives on when to
deliver positive punishment, stating it should be given the instant an undesirable behavior occurs. Fennell
(2002) discussed timing on occasion, and in one example, advocated issuing the command after the emitted
behavior – this could make it more difficult to get dogs to respond to commands. Some of the Monks of New
Skete’s (2002) directions on consequence delivery featured immediacy. Academic literature generally places
importance on a close temporal relationship between the target behavior and reinforcement or punishment
(i.e., temporal contiguity). Reinforcement and/or punishment is considered most effective when delivered
immediately after an emitted behavior (Bouton, 2007). The degree of correlation between a behavior and its
effects (the reinforcer) is important during learning (Baum, 1973); that is, the occurrence of a behavior
during training has to be predictive of the reinforcer (i.e., contingency). While temporal contiguity alone is
not sufficient for learning, the shorter the delay between the behavior and its effects the higher the
correlation between these two events should be (Baum, 1973). Although animals can learn novel tasks when
positive reinforcement is delayed, such delays can decrease the correlation between the behavior and the
reinforcer (e.g., by giving time for other behaviors to occur before the reinforcers are delivered, thus
decreasing contingency), and so can also result in compromised speed of task acquisition and slower rates of
responding (Dickinson, Watt, & Griffiths, 1992; Lattal & Gleeson, 1990; Schlinger & Blakely, 1994). The
importance of timing was particularly emphasized in two books (Stilwell (2005) and Pryor (1999)) in this
review.

Training Techniques and Applicability

There was variability in the training techniques recommended across these books. Pryor (1999) was a
proponent of positive reinforcement techniques. Fennell’s (2002) and Stilwell’s (2005) books described
techniques that were technically positive reinforcement and positive and negative punishment, albeit strongly
biased towards positive reinforcement. The Monks of New Skete (2002) also advocated a mixture of positive
reinforcement and positive and negative punishment, although their positive punishments were more severe.
Millan’s & Peltier’s (2006) methods predominantly employed positive punishment for behavior
modification.

When evaluating the techniques described when training a dog to either sit, down, or come, only
Fennell’s (2002), Stilwell’s (2005), and The Monks of New Skete’s (2002) books can be compared. (Millan
& Peltier (2006) and Pryor (1999) did not provide detailed instructions on how to train these tasks.) The
Monks of New Skete (2002) advocated using negative reinforcement (physical manipulation) when training
a dog to sit or lie down; this is surprising, as since the 1980s there has been a shift away from physically
coercing dogs during training. Despite this, their techniques were explained in detail, accompanied by
photographs, and would be easily replicable. On the other hand, not all of Fennell’s (2002) non-coercive,
luring methods were described in enough detail to replicate easily. Stilwell (2005) also advocated non-
coercive training techniques, but explained them clearly, step-by-step.
It is important that dog guardians understand how and when to apply particular training techniques. There is often variation in people’s ability to identify dog behavior, including aggression (Diesel, Brodbelt, & Pfeiffer, 2008; Tami & Gallagher, 2009), which may lead to application of training methods inconsistently or at inappropriate times. Many people who report using physically aversive training techniques (e.g., hitting or kicking, grabbing jowls, or doing an “alpha roll”), state that their dogs responded aggressively to such interventions (Herron, Shofer, & Reisner, 2009). Guardian-reported behavior problems often include aggression, so the inappropriate use of physically aversive training techniques may pose dangers. Although it is important to note that the choice of training methods employed by a person may be a reflection of the behavior displayed by the dog (for example, there may be a stronger tendency for people to punish dogs who are displaying problem behaviors), studies have found an association between the reported use of only positive reinforcement and few behavior problems, and vice versa (Blackwell et al., 2008; Hiby et al., 2004). Reward-based training methods have also been associated with dogs’ ability to learn a novel task, whereas punishment-based training methods were negatively correlated with performance at a novel task and dogs’ levels of social interaction with an unfamiliar person (Rooney & Cowan, 2011). In addition to this, dogs can display behavioral signs of stress (e.g., lowered posture) and physiological responses (e.g., increased cortisol values) in response to aversive stimuli (Beerda, Schilder, van Hooff, de Vries, & Mol, 1998; Haverbeke, Laporte, Depiereux, Giffroy, & Diederich, 2008). Although a causal link has not been established, it could be argued that punishment-based techniques have been shown to be associated with fewer benefits than reward-based training methods and in fact, have been associated with significant negative effects (e.g., aggressive responses). Considering all of this, advising the general dog owning public to use physically aversive training techniques, as suggested in some of these books, may not be the most prudent course of action in terms of safety and animal welfare.

Human-given Cues

Most of the books referred to the use of human-given communicative cues in general terms (e.g., when greeting dogs, on walks, modifying undesired behaviors, etc.), with the exception of Pryor’s (1999) book which contained very little of this. More-noticeable differences between books became apparent when comparing the information provided regarding teaching the specific obedience tasks: sit, down, and come.
Millan & Peltier (2006) did not provide any instructions on how to teach these tasks. Pryor (1999) mentioned using certain human-given cues when teaching sit and come, but without details. Fennell (2002) gave instructions on proximity and using hand gestures during training sit, and several cues for teaching come. Her description of training down contained scant detail, making it difficult for readers to easily replicate. Stilwell’s (2005) and The Monks of New Skete’s (2002) books provided the most detailed advice with regards to which human-given cues people should use when training the sit, down, and come commands. Both of these books detailed the use of a range of human-given cues while training these tasks, although The Monks of New Skete (2002) discussed more cues than Stilwell (2005) and also provided photographs illustrating the training methods.

Academic literature has shown dogs to be receptive to human-given cues such as vocalizations, pointing, and glancing (e.g., Fukuzawa et al., 2005; Miklósi et al., 1998). Because dogs are sensitive to human cues and thus they may have an effect during training, dog guardians could benefit from using such cues more judiciously. Although all of the books (with the exception of Pryor, 1999) did refer to human-given cues throughout, when it came to explaining how to teach three common obedience tasks the level of detail in the instructions was variable across the books.

Conclusion

Good dog training books should have information that readers can understand and apply, as well as a scientific basis to their theories. A review of five popular “dog training” books found that these texts do not all meet these functions, and thus are not necessarily instructional manuals for dog guardians. This study revealed inconsistencies in the information provided with regard to learning theory and the use of human-given cues during training. Clear, replicable information was not presented in all books, and some failed to give precise instructions (e.g., Fennell, 2002). Training methods differed across the books, with some authors (i.e. Millan & Peltier, 2006; Monks of New Skete, 2002) advocating positive punishments that may be inadvisable for people to use. While Pryor’s (1999) book contained in-depth discussions on aspects of learning theory, the fact that it is a general training text (and thus lacks many dog-specific instructions) may mean it doesn’t fulfill all purchasers’ needs if they are seeking a “dog training” book. Of all the books examined in this study, Stilwell’s (2005) book It’s Me or the Dog reflects a relatively current understanding
of dog behavior and training techniques, combined with providing the most easily-applied information and recommending methods generally accepted to be safest and easiest for dog guardians to replicate.

This study examined five popular dog training books, however, many others were not included. Books such as *How to Behave so Your Dog Behaves* by Sophia Yin (2010), *The Complete Idiot’s Guide to Positive Dog Training* by Pamela Dennison (2011), and *How to Teach a New Dog Old Tricks* by Ian Dunbar (1996) appear to be more adequate texts, and it would be interesting to review such books using this study’s criteria.

These books have consistently remained high on the best selling lists of three large internet retailers over the past five years; this indicates the books’ on-going popularity and that they probably contribute significantly to the type of information that is accessed by dog guardians.

**References**


<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive reinforcement</td>
<td>Presentation of a stimulus or event after a behavior that increases the probability of the response.</td>
<td>“Go outside with him and give him lots of praise and a treat when he does what he’s supposed to do” (Stilwell, 2005, p. 124).</td>
</tr>
<tr>
<td>Negative reinforcement</td>
<td>Removal or prevention of an ongoing stimulus or event by a behavior and subsequently the rate of that response increases.</td>
<td>“As you come to a stop, transfer your leash completely to your right hand, pulling up on it slightly. At the same time, with your left hand reach down and back and gently press down on Una’s rear end, easing her into a sit as you say, “Una, sit”” (Monks of New Skete, 2002, p. 233).</td>
</tr>
<tr>
<td>Positive punishment</td>
<td>Presentation of a stimulus or event after a behavior that decreases the probability of the response.</td>
<td>“When I have a dog on a leash, I’ll give a little tug upward to snap the dog out of unwanted behavior” (Millan &amp; Peltier, 2006, p. 219).</td>
</tr>
<tr>
<td>Negative punishment</td>
<td>Removal of a stimulus or event after a behavior that decreases the rate of the response.</td>
<td>“Whenever this [dog growling at visitors] happened, I asked Steve and Debbie to get up and walk out of the room” (Fennell, 2002, p. 118).</td>
</tr>
<tr>
<td>Aversive stimulus</td>
<td>A stimulus that an animal avoids or attempts to escape from.</td>
<td>“Simply grasp her paws when the dog jumps up on you; gently move the paws slightly to the [sic] each side and begin moving slowly to keep the dog up on her two hind legs … the dog becomes quite uncomfortable and wants to get down” (Monks of New Skete, 2002, p. 287).</td>
</tr>
<tr>
<td>Classical conditioning</td>
<td>When the control of respondent behavior is transferred from one stimulus to another by stimulus-stimulus association.</td>
<td>“Feed him, and then while he’s eating, try snipping the scissors or clippers near him. Do this a few times. He’ll begin to associate these tools with eating time, which will make for a more pleasant experience at the groomer’s” (Millan &amp; Peltier, 2006, p. 251).</td>
</tr>
</tbody>
</table>
Table 2

*Dog training information contained in books, discussed in reference to all situations other than training sit, lie down, and come behaviors*

<table>
<thead>
<tr>
<th>Author</th>
<th>Explanation of reinforcement</th>
<th>Explanation of punishment</th>
<th>Use of R+</th>
<th>Use of R-</th>
<th>Use of P+</th>
<th>Use of P-</th>
<th>Timing of command</th>
<th>Use of classical conditioning</th>
<th>Use of classical conditioning</th>
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Note. R+ = positive reinforcement, R- = negative reinforcement, P+ = positive punishment, P- = negative punishment. These data are instances of these techniques being advocated by the authors; the numbers in brackets represents the number of times the timing of these techniques was referred to. Presence of information = x; absence of information = -.
Table 3
Dog-human communication information contained in books, discussed in reference to all situations other than training sit, lie down, and come behaviors

<table>
<thead>
<tr>
<th>Author</th>
<th>Eye contact</th>
<th>Head / body orientation</th>
<th>Proximity</th>
<th>Body position</th>
<th>Hand / arm gestures</th>
<th>Tone of voice</th>
<th>Volume of voice</th>
<th>Pronunciation</th>
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*Note.* These data are instances of advice being given on the use of these communicative cues.
Table 4

Dog training information contained in books, discussed with reference to training dogs to sit, lie down, and come

<table>
<thead>
<tr>
<th>Author</th>
<th>Command</th>
<th>Use of R+</th>
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Note. R+ = positive reinforcement, R- = negative reinforcement, P+ = positive punishment, P- = negative punishment. These data are instances of these techniques being advocated by the authors; the numbers in brackets represents the number of times the timing of these techniques was referred to.
Table 5

Dog-human communication information contained in books, discussed with reference to training dogs to sit, lie down, and come

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<tr>
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Note. These data are instances of advice being given on the use of these communicative cues.