

An overview of dog training and behaviour



Zazie Todd PhD CTC iCatCare CertFB, creator of the Companion Animal Psychology blog and newsletter *The Pawsitive Post*, reviews the current literature on dog training and behaviour

Most people have a good relationship with their dog, even if there is some kind of behaviour issue they would like to deal with. Common behaviour issues include jumping up, pulling on leash, aggression, and fear and anxiety, including separation-related issues. There are concerns that the pandemic may have exacerbated some issues, particularly those due to lack of socialisation and lack of practice at alone time. Behaviour issues can result in a worse human-animal bond as well as re-homing, the return of dogs to shelters, and euthanasia, so it is important to know how best to prevent and resolve them.

THE IMPORTANCE OF SOCIALISATION

Puppies have a sensitive period for socialisation between three and 12 to 14 weeks; the time at which it ends may vary between breeds (Morrow *et al* 2015). This period includes when the puppy is at the breeder (or shelter/rescue), which means that people should ask the breeder about their socialisation programme (on top of questions about health checks and seeing the pup with mom). And it's essential for puppy guardians to continue to socialise their puppy at home. Many people have concerns about the safety of socialisation for pups who have not yet had their full vaccinations; puppy class (in which all the pups have had their first vaccinations) is a good way to deal with this.

Pet store puppies (likely from commercial breeding

establishments) are more likely to have behaviour issues, including aggression to their owner, than puppies from a responsible breeder (McMillan *et al* 2013). Lack of socialisation, genetics, prenatal stress, poor early life experiences, early weaning, and the pet store environment may all play a role (McMillan 2017).

Behavioural issues including aggression are the single biggest cause of death in pet dogs under the age of three, and better socialisation could go a long way towards preventing many of those issues (Boyd *et al* 2018). Only a small number of those guardians who euthanised their pet had previously consulted with their vet about the issue. These results show the importance of veterinarians asking clients about their dog's behaviour and being able to offer resources to help resolve issues before they get to this point.

WHAT ARE REWARD-BASED TRAINING METHODS?

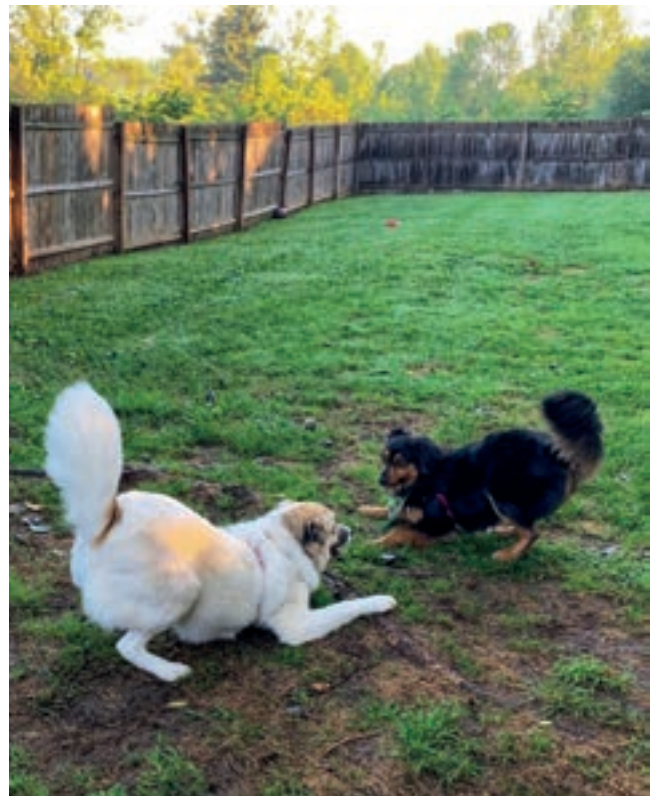
Reward-based methods rely on giving rewards for good behaviour and removing the rewards for behaviours we would like to see less of. In technical terms, reward-based methods are positive reinforcement and negative punishment. We might also include humane management strategies (such as using a harness with a front-clip to prevent a dog from pulling on leash) (Todd, 2018). In practice, positive reinforcement means using food

rewards, play, or petting as rewards. Research shows that food works best to motivate dogs (Okamoto *et al* 2009; Fukuzawa and Hayashi 2013). Dogs are sensitive to the quality of rewards and, although they have individual preferences, over time most prefer a variety of high-quality food rewards (Riemer *et al* 2018; Bremhorst *et al* 2018). In technical terms, aversive methods are positive punishment and negative reinforcement. They rely on the addition or removal of something that is aversive for the dog such as a tug on the leash, a prong collar, or electronic collar. Many dog guardians still use a mix of both reward-based and aversive methods, which means it is important to keep talking about the benefits of reward-based approaches.

Research shows there are risks to using aversive methods, including fear, anxiety, aggression, and a worse relationship with the owner (Ziv, 2017). One study compared dogs that attended training classes that used either reward-based or aversive-based methods. The dogs trained with aversive methods had a worse relationship with their owner as demonstrated by the secure base effect (a measure of attachment that is also used with human infants and their care-givers) (Vieira de Castro *et al* 2019). Another way to assess the effects of training methods is to use a cognitive bias test, in which dogs are first taught that a bowl in one location always contains food, while in another it doesn't. Once dogs have learned this, they are shown a bowl in an ambiguous location, the idea being that if they are optimistic it contains food, they will get there faster. Dogs trained with aversive methods take longer to reach the ambiguous bowl, suggesting they are less optimistic than those who instead attended a training class that used reward-based methods only (Vieira de Castro *et al* 2020). Another study used a similar approach to compare dogs trained with reward-based methods only and those who were trained using two or more aversive methods (from a list of physical punishment, electronic or citronella collars [bark-activated or remote], a pet corrector, water pistol, choke/check chain, and rattle can or similar 'distraction' noise) (Casey *et al* 2021). When people used two or more of these methods dogs were more pessimistic. This is an important finding because the results of this test are thought to reflect long-term welfare.

REWARD-BASED TRAINING METHODS AND ANIMAL WELFARE

Thinking about training from the perspective of animal welfare, there are several ways that reward-based training contributes to positive experiences, which the Five Domains model highlights as an important aspect of welfare (Mellor 2016). Reward-based training is a fun activity that engages the dog's brain, involves spending time with a friendly person, and results in the dog getting different, tastier bits of food than at their mealtimes. There is some research that shows dogs prefer to work for their food than have it for free, something the scientists who did the study called the "Eureka effect" (McGowan *et al* 2014)



Play is a natural behaviour for dogs. Here, you can see play bows and play face. Photo credit: Jennifer Fedele.

and which is more commonly known as contra-freefloating. Some training (such as husbandry training) can help the dog to better cope with situations they might otherwise find stressful, such as being at the vet.

Of course, some behaviour "issues" result from perfectly normal dog behaviour. In this case, it can be helpful to explain to dog owners what normal behaviour is, for example that dogs like to chew, dig, play, etc. Providing "allowed" outlets for these behaviours is an important part of caring for a dog.

Up to 72.5 per cent of dogs have some form of fear or anxiety, with sensitivity to noises the most common, and better socialisation and improved breeding practices would help (Salonen *et al* 2020). Fear of strangers and unknown dogs is associated with inadequate socialisation, as well as breed differences, getting less exercise, less training, and taking part in fewer activities with the guardian (Puurunen *et al* 2020). When a dog is fearful, this is a welfare concern that should be addressed, but guardians may miss common signs of fear and anxiety.

MANAGEMENT, EXERCISE, AND ENRICHMENT

Management can prevent problem behaviours from being rehearsed and can sometimes be the entire solution to an issue. For example, keeping the kitchen counter free from food, locking the kitchen bin in a cupboard, and using a no-pull harness (i.e., one with a front-clip), are all important management solutions.

As well, some behaviour issues are due (at least in part) to boredom and lack of exercise. There's some evidence that dogs who get less exercise are more likely to have



Research shows that dogs will run faster for preferred rewards. Photo credit: Allison Lamminen, Delighted Dogs (<https://delighteddogsmn.com/>)

behaviour issues, although it's not clear what the causal direction is. We all know the expression "a tired dog is a happy dog", but people whose dog has behaviour issues may also find it harder to take their dog for a walk. Great options for exercise and enrichment include food puzzle toys, snuffle mats, tug and flirt pole play, and classes such as tricks, agility, or nose work, many of which are also available online these days. Nose work can be a good choice for reactive dogs as only one dog participates at a time.

PAIN AND OTHER MEDICAL ISSUES

Medical issues may cause or contribute to some behavioural issues. While house soiling in a previously house-trained dog is an obvious case where people should take their dog to the vet, dog guardians may not realise this and will sometimes attribute such cases to "spite" or "hatred." An assessment of dogs with noise sensitivity found that, in those with musculoskeletal pain, the noise sensitivity had a later onset (typically four years later than for those dogs without pain), and was also associated with learning to avoid other dogs and with generalising to environments in which loud noises occur (Lopes Fagundes *et al* 2018). According to Mills *et al* (2020), pain can manifest in problem behaviours in several ways, including making existing fear and anxiety worse, directly causing behaviour issues, or playing a role in cases where the dog guardians are frustrated they have got "so far but no further" in their attempts to resolve the issue. Mills *et al*

say that "it is our recommendation that it is better to treat suspected pain first rather than consider its significance only when the animal does not respond to behaviour therapy."

VETS WORKING WITH OTHER PROFESSIONALS

Easily-available information on dog training and behaviour is not necessarily correct. Browne *et al's* (2017) review of five best-selling dog training books found that many included inaccurate or inconsistent information, recommended aversive methods, and referred to pack leadership or used other anthropomorphisms in a confusing way. In addition, dog training is a technical skill and dog guardians often need coaching and practice. People's confidence in using reward-based methods is a factor in their decision to use them, and negative emotions associated with the situation may make people more likely to pick aversive methods (Williams and Blackwell 2019). Hence, access to reliable information and advice is important in helping people to cope with and resolve behaviour issues.

Irish vets and veterinary nurses typically do well on questions relating to dog training, according to research (Shalvey *et al* 2019). But there are a few areas where more than half of vets picked the wrong answer, including mistakenly thinking that a second dog would help with separation anxiety (instead, an approach based on desensitisation to absences, in concert with medication if prescribed by a vet, is the standard approach). Another common error was to support the use of underground electronic fences. This is an aversive approach and hence has risks like other aversive methods, and dogs escape more often than when contained by a physical fence (Starinsky *et al* 2017).

This study also suggests that there is a lot of potential for veterinarians to develop either in-house or referral-based training and behaviour services. Because dog training and behaviour is not regulated, it is essential to choose training partners wisely.

- The Association of Pet Behaviour Counsellors (<https://www.apbc.org.uk/>) in the UK maintains a register of members who have attained appropriate education.
- The International Association of Animal Behaviour Consultants UK and Ireland Division (<https://m.iaabc.org/about/divisions/uk/>) oversees Certified Dog Behaviour Consultants, who must demonstrate education and experience to gain those letters (CDBC).
- The Association of Pet Dog Trainers Ireland (<http://apdt.ie/>) maintains a register of professional members who are required to use only reward-based methods and stay up-to-date on education.
- The Institute of Modern Dog Trainers (imdt.uk.com) is active in Ireland, encouraging progressive dog training methods.
- The Association for the Study of Animal Behaviour (<https://www.asab.org/ccab>) is an academic society with high standards that has a strict entry policy, and



there are some Irish members.

- The Pet Professional Guild (<https://www.petprofessionalguild.com/>) keeps a directory of members who are all committed to using only reward-based methods.

Among the signs that dog trainers are using outdated approaches are words like “balanced”, “dominance”, “pack leader”, “mother nature”, and “electronic collar” (unless the trainer is explicitly stating that they don’t use these techniques) (Johnson and Wynne 2022).

CONCLUSION

Most behaviour issues in dogs can be resolved relatively easily. The sourcing of puppies from responsible breeders and good socialisation during the sensitive period will increase the likelihood of a puppy growing up to be a friendly, confident adult dog. Unfortunately, widely available information about both training and behaviour is not necessarily accurate. In addition, although aversive methods have risks including of fear, anxiety, stress, and aggression, many dog guardians continue to use them at least some of the time. Reward-based training avoids those issues and is a positive experience for the dog. Lack of exercise and enrichment, poor management practices, and medical issues (including pain) may also contribute to behaviour issues. It’s a good idea to ask dog guardians if they are dealing with any behaviour issues and to work with, or refer to, appropriately-qualified, reward-based trainers and behaviourists as needed.

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Reader Questions and Answers

1. **WHICH OF THE FOLLOWING METHOD(S) ARE USED IN REWARD-BASED TRAINING?**
 - A. Positive reinforcement and negative punishment
 - B. Positive reinforcement
 - C. Positive punishment
 - D. Positive punishment and negative reinforcement
2. **WHICH OF THESE APPROACHES TO DOG TRAINING ARE REWARD-BASED?**
 - A. Use of a shake can to deter a dog from jumping on the kitchen counter
 - B. Use of an underground electronic fence to keep a dog contained
 - C. Leash corrections to prevent the dog from pulling
 - D. Food rewards or play after the dog has done the desired behaviour
3. **WHICH OF THE FOLLOWING IS KNOWN TO BE ASSOCIATED WITH DOGS' FEAR OF STRANGERS?**
 - A. Taking part in lots of training classes
 - B. Taking part in many activities with the guardian
 - C. Inadequate socialisation
 - D. The dog's age
4. **WHICH OF THE FOLLOWING IS ASSOCIATED WITH CASES OF NOISE SENSITIVITY THAT ALSO INVOLVE PAIN?**
 - A. An early onset
 - B. A later onset
 - C. The guardian refusing to comfort the dog
 - D. The dog yelping
5. **WHICH OF THE FOLLOWING WORDS IN A DOG TRAINER'S PHILOSOPHY STATEMENT IS LIKELY TO INDICATE THE USE OF SOME AVERSIVE TRAINING METHODS?**
 - A. positive reinforcement
 - B. treats
 - C. pack leader
 - D. reward-based

ANSWERS: 1A; 2D; 3C; 4B; 5C.