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The language we use when discussing our training methods can sometimes be slightly misleading. Much discussion is given to the use of terms such as *force-free*, *rewards based* and *positive reinforcement*. Sometimes there will be shared-meaning and at other times, these terms will be used and attributed to diametrically opposed training methods. The words 'reward' and 'positive reinforcement' are often used to describe the same process but are they really the same?

Let's begin with a definition of reinforcement and a few other terms you are likely to come across when reading about *rewards based*, science based, force-free training. The term to reinforce means to strengthen and it is used in behavioral psychology to refer to a stimulus which strengthens or increases the probability of a specific response. Behavior is the function of its consequences and reinforcement strengthens the likelihood of a behavior. To qualify as reinforcement an experience must have three characteristics: First, the behavior must have a consequence. Second, the behavior must increase in strength (e.g. occur more often). Third, the increase in strength must be a result of the consequence (Chance, 2013)

When comparing rewards to reinforcement, I am referring to one of the quadrants of operant conditioning: positive reinforcement. Positive means that a stimulus is added. With positive reinforcement, a behavior is followed by a stimulus (which the subject seeks out/will work to receive) which reinforces the behavior that precedes it, resulting in an increase in the frequency, intensity and/or duration of that behavior. To clarify, a reinforcer is a stimulus that, when it occurs in conjunction with a behavior and is contingent on that behavior, it makes that behavior occur more often. But what if the behavior doesn't increase in frequency, strength or duration? What if the behavior continues to occur with the same frequency or occurs less often? In this case, we can reliably say that the consequence stimulus would not qualify as reinforcement.

Is a reward the same as a reinforcer? The simple answer is no, it is not. Although, when simplifying our language, it is often useful to advise our clients to *mark and reward* (*click and treat/mark and pay*), a reward and a reinforcer/reinforcement consequence are not the same. Let's look at the definition of a reward:

- **A thing given in recognition of service, effort, or achievement**
- **A sum offered for information leading to the solving of a crime, the detection of a criminal, etc. (Oxford University Press, 2017)**

The key here is in the definition. I may be given something in recognition of my hard work but that does not necessarily mean that I will work harder in the future. If my reward for all the extra hours I worked were a simple thank you – would that act as reinforcement? What about if my reward for all the hours I worked were a big cash bonus – would that serve as a reinforcement consequence?

A reward may or may not positively reinforce a behavior. There are a few reasons why, one being that the giver of the reward is who decides what to give and denotes it as a reward.

The recipient might not be quite so enthusiastic about the perceived reward. Bryn (my Golden Retriever) and I were once rewarded with a ‘beautiful’ trophy for taking first place in an event at a local competition. The trophy went on to take pride of place hidden away in a cupboard! Did the trophy act as a reinforcer? As a result of that consequence (being rewarded with a trophy), did Bryn and I enter more competitions/try to win more competitions? No. The reward was only ‘beautiful’ in the eye of the giver. The recipient of the reward thought otherwise, hence its ubication – hiding out in the back of a cupboard!

Rewards often come with some sort of judgement on the person or animal they are directed at whereas reinforcers are linked to the behavior not the giver nor the recipient. Just like rewards, reinforcers can be delivered by people but they can also be delivered by the environment. Suppose for example that one morning your dog manages to slip out of the door and chase the neighbor’s cat. The dog has a wonderful time and the next morning flies out of the door as soon as it is opened. That one act of joyfully chasing the neighbor’s cat has effectively reinforced rushing out of the door as soon as it is opened! If the neighbor’s cat never ventures into your yard again, the behavior may undergo extinction but this is unlikely as the act of running at full speed out of the door and across the yard is undoubtedly self-reinforcing – offering intrinsic reinforcement and serving as wonderful motivation! What if the behavior is put on a variable schedule of reinforcement i.e. the cat is occasionally available to be chased? You can probably guess the answer. The behavior of rushing out of the door will go from strength to strength as it is being extrinsically reinforced in the same way as playing on a slot-machine is – you know that if you keep playing, you are sure to win again at some point!



Although, I have clarified that rewards and positive reinforcement consequences are not the same, that does not mean I am never going to tell people to reward their dog. I also tell people to pay their dog. That doesn't mean I want my clients to throw a wad of cash at their dogs and my clients know that! My clients are intelligent people and some may wish to delve deeper into the world of behavioral science but many are happy to stick with the world of *click and treat or mark and reward*.

However, as pet industry professionals, I do believe that we should have a clear understanding of terms such as 'positive reinforcement' and recognize that just because we have 'rewarded' a dog with a throw of a ball or a tasty treat, that does not necessarily mean we have positively reinforced the behavior. Only the future will tell us that!

