

Trigger Stacking and Coping Thresholds



Does your dog struggle with certain situations, showing fearful, defensive or even aggressive behaviour? Do you ever wonder why they appear to be totally fine with these situations sometimes, and not at other times?

Dogs who are nervous or have behaviour issues can sometimes appear unpredictable, but this is very rarely the case. **Trigger stacking** and **Coping Thresholds** are two really useful concepts which will help you understand your dog's "unpredictable" behaviour, and provide support around things that worry them.

What is stress?

Stress can be defined as the response of an animal to demands placed upon it by the environment, to which it must change or adapt its behaviour. Stress can be either positive or negative, depending on whether or not the animal is able to cope with this need to adapt. Negative stress occurs when the animal is unable to cope with the demands placed upon it by the environment.

For example, a dog who is nervous of unfamiliar people will feel threatened when approached by a strange person on a walk. If they are able to move away from the person, they have been able to adapt and cope with the situation. However if the dog is on-lead and has no option to move away, he will be unable to adapt and change his behaviour in order to cope with the situation. This will cause negative stress. Each dog will differ in terms of what causes them negative stress.

Stress can either be acute (short term) or chronic (long term). For example, a dog who is frightened of the children he lives with will likely be experiencing chronic stress. The dog described above, who is scared of unfamiliar people, will experience acute stress when he meets a strange person on a walk.

Chronic stress is generally more harmful than acute stress, and can cause medical and behavioural issues over time. However, acute stress can become chronic stress if it happens regularly – e.g. if the dog encounters a number of unfamiliar people on every walk.

What is arousal?

"Arousal" in dogs is a state of physical and emotional alertness and readiness for action. A dog who is relaxing upside down on the sofa will have low arousal levels, whilst a dog excitedly waiting for his tennis ball to be thrown will have higher arousal levels.

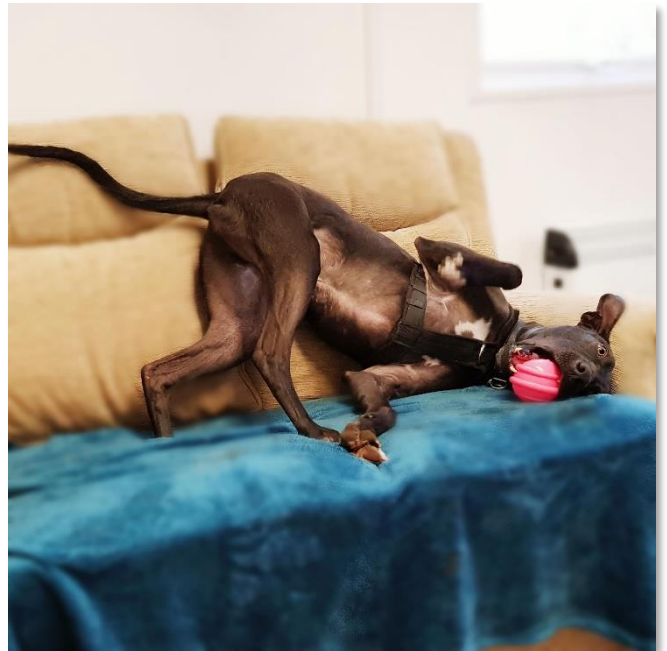
Arousal levels can be increased by both positive and negative events which the dog finds stimulating, exciting or stressful. These events cause an increase of the hormones adrenaline and cortisol in the brain, increasing excitement and reactivity to the environment.

An increase in arousal levels is totally normal during exciting, fun or high energy activities. If arousal levels continue to rise however, the dog can become very wound up or hyperactive, and will often show inappropriate and “over the top” behaviours such as mouthing/grabbing, spinning, humping, jumping up, lunging, barking, overly rough play etc. We call this “over-arousal”.

Over arousal in dogs causes a state of emotional overload, during which the dog is unable to think clearly or regulate their own behaviour. Very high levels of arousal can often escalate into inappropriate behaviour, or even aggression.

For example, a dog who becomes over aroused during play with another dog may begin to show increasingly inappropriate behaviours such as overly hard mouthing, grabbing, or even start a fight with the other dog. High arousal levels also make it very difficult for dogs to learn or retain new information, which means trying to train an over-aroused dog is rarely successful!

Typical signs of arousal include fast heart/respiration rate, dilated pupils, tense body posture, hyper-vigilance (on high alert), panting, barking/whining, spinning, mouthing/grabbing, jumping up, humping, increased pulling/lunging on lead, snatching at food, high tail/ear position, hackles raised, increasingly rough play.



What is a “trigger”?

A “trigger” is anything which causes your dog to feel stress, arousal, pain or fear. Each dog is an individual, with their own specific fears and stressors. Your dog will have their own set of unique triggers, which will be different to those of another dog.

Triggers can be certain events or experiences (such as going to the vet or a fireworks display), particular environments (such as busy areas, or walking routes on which they’ve had bad experiences in the past) or more specific things such as traffic, loud noises, other dogs or unfamiliar people.

Usually triggers are things which cause your dog to feel negative emotions like pain, fear or stress. However they can also be things which cause your dog to feel positive emotions, but increase arousal levels (such as anticipation of a walk, the chance to greet another dog, high energy play etc).

Coping Thresholds

Every dog has a coping threshold - an emotional breaking point at which they are no longer able to cope with the levels of fear, stress, arousal or pain that they are currently feeling. Once a dog is pushed over this threshold, they will enter the “fight, flight or freeze” state. This means that for many dogs, reaching the coping

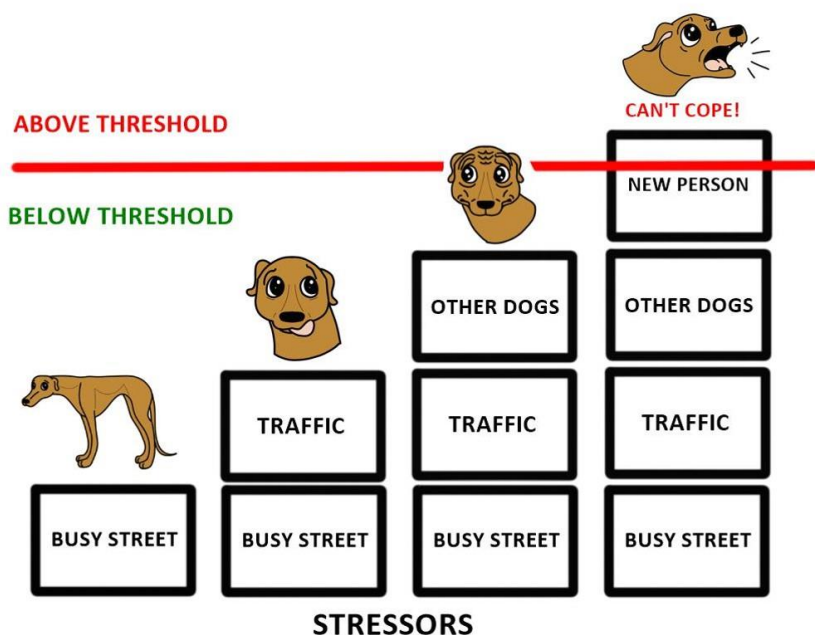
threshold will cause an aggressive response. Others may panic and try to flee, or shut down entirely. Like people, individual dogs will have different coping thresholds, with some reaching breaking point more quickly than others.

Trigger stacking

Trigger stacking occurs when a dog is exposed to a number of triggers all at once, or one after the other. Each additional trigger “stacks” on top of the last, raising stress/arousal levels and pushing the dog closer to his coping threshold. If your dog is exposed to enough of his triggers at once, he will enter the fight/flight/freeze state.

Some triggers will push your dog closer to threshold than others, depending on how stressful or arousing he finds that particular trigger. Some triggers may even be enough to push your dog over threshold when encountered on their own.

Triggers do not have to be presented all at one time in order to cause trigger stacking. When your dog is exposed to a trigger, his body activates a hormonal and neurological response to the stress or arousal he’s experiencing. Since the physical and mental effects of stress and arousal can last for at least 24 hours following a stressful event, trigger stacking can even occur when a dog is exposed to a number of triggers spread out over a period of hours, or even days.



This dog has a number of triggers - he is fearful of unfamiliar people, dogs, traffic and busy environments. When walking on a busy street with no other triggers present, the dog feels uncomfortable but is able to cope. Each additional trigger pushes him closer to threshold, making him feel more and more uncomfortable, but is not enough to cause him to respond aggressively - until finally he is unable to cope when approached by an unfamiliar person.

Trigger stacking explains why dogs can sometimes appear to be unpredictable around their triggers. Often when a dog reacts with aggression, we are surprised because the dog is “usually fine” in that scenario. In fact, the dog has always found the scenario stressful – but there just haven’t been enough triggers present previously to push the dog beyond coping threshold. Combined with enough additional triggers, the scenario has become enough to provoke an aggressive response.

Examples of trigger stacking

Buddy

Buddy is fearful of being approached by unfamiliar people. He is also worried by traffic, but lives in a rural area so doesn't often come across it. He loves other dogs, and gets very over-excited about meeting them. Buddy only meets new people in the home, or sometimes when walking in the fields around his house. He has never responded with aggression when approached, even though he feels very uncomfortable, so his owner believes he is fine with strangers.

On this occasion, Buddy's owner has decided to take him into town with her. It's busy in town, so Buddy has to walk through crowds of people. As a nervous dog, this is his first trigger, but he is able to cope. There is a lot of traffic in town, which is another trigger for Buddy, but he has not yet reached his threshold. Upon reaching the fundraising event, Buddy notices that there are a lot of other dogs in attendance. This is a positive trigger, but it still increases his arousal levels, pushing him closer to threshold.

By the time an unfamiliar man approaches to stroke Buddy, he is dangerously close to his coping threshold. This final trigger is more than he can cope with, and Buddy snaps at the man, catching him on the hand. Buddy's owner is shocked, because he has never done this before, and believes he has become unpredictable.

Wendy

Wendy is an ex-working lurcher, who was not used to being on-lead around other dogs before being rescued. She feels restricted and vulnerable on-lead, so can be reactive towards unfamiliar dogs. She is able to make friends with dogs after gradual introductions, and has always enjoyed walking with Jake, a greyhound.

Wendy was hit by a car before arriving in rescue, and was very badly injured. Due to needing so much veterinary treatment, she developed a serious fear of the vet. She has never shown aggression towards the vet, but will become very withdrawn whilst she is there, shaking and trying to hide. On this occasion, Wendy has been to the vet for her annual booster. This is a huge trigger for Wendy, pushing her almost to threshold even in the absence of any other triggers.

She is still feeling the stress from her vet trip the next day, when her handler takes her out for her usual walk with Jake. Jake approaches Wendy and sniffs her in greeting – this causes a small amount of stress for Wendy, who still feels somewhat vulnerable even though she knows Jake well.

Unfortunately, Wendy is already close to threshold and is unable to cope with this small stressor. She responds to his greeting by barking and snapping in his face. Wendy's owner is shocked, because she is normally friendly with Jake.

Preventing trigger stacking

Once you understand the concept of trigger stacking, you can start taking steps to prevent your dog from reaching his coping threshold. If your dog is reactive, has ever bitten, or has shown aggressive/defensive

behaviour in the past, you can help to stop these behaviours from happening again by being aware of his triggers and helping to keep him below threshold.

- Make a list of all your dog's known triggers. Remember to include positive triggers which increase arousal, as well as those which cause negative emotions. Try to avoid the negative triggers whenever possible.
- Be aware that when your dog encounters one of his triggers, or has a stressful experience, he may be closer to threshold for the next 24 hours. Try to avoid any of his other triggers, any stressful or exciting situations, or any situations in which encountering triggers is more likely for the next day or so. This will give him a chance to reset, and prevent him from being pushed over threshold.
- Remember that by the time your dog is pushed over threshold and into fight/flight/freeze mode, he has already been feeling uncomfortable for some time. The aim is to step in before he reaches that point.
- If your dog is reactive, has a lot of triggers or frequently goes over threshold, try to avoid activities which will increase his arousal levels (such as high energy toy/chase games, exciting walks etc). Stick to calm, relaxing activities such as quiet walks, food filled toys, long lasting chews, foraging games etc.
- Remember that if your dog is injured or feeling unwell, he is likely to be closer to threshold than he would normally be, and therefore less likely to cope with additional triggers.
- If your dog does go over threshold unexpectedly, try to look back at the last 24 hours and figure out which triggers may have combined to push him to that point. This will help you to avoid a similar scenario in future.

If you are having any issues with your dog's behaviour, please get in touch with us for advice and support.

The information provided in this document provides general guidance on the matters outlined and is not intended to replace the need for you to take qualified and appropriate behaviour/training advice on these matters.

Please remember, that as an owner of a Forever Hounds Trust dog you have access to our team of qualified behaviourists and FREE behaviour and training advice. No matter what your behaviour or training question is, we are here to help. You can contact the team by emailing: behaviour@foreverhoundstrust.org

Written by Rachel Cartwright, MSc, BSc (Hons) for Forever Hounds Trust, 2020.