



POSITIVE P.A.C.T. IS A REGISTERED TRADEMARK GALEN MYOTHERAPY

## GALEN CANINE NEUROPHYSICAL THERAPY incorporating the **Positive P.A.C.T.® Approach** *Progressive Affective Cycle of Therapy*

Galen Myotherapy is a physical therapy, that can also be classed as a neuroscience, incorporating a specific and unique handling protocol. The handling protocol used is called Positive P.A.C.T.® (Progressive Affective Cycle of Therapy)® and it is based on giving the dog choice.

Galen Myotherapy specialises in treating dogs with chronic muscular pain; often resulting from secondary conditions, (caused through adaptive/compensatory physical, postural change), or an old untreated physical injury. The treatment is specifically known as a hands-on, manual, or physical therapy.

The treatment physically manipulates the surrounding tissues, creating a positive bio/neurochemical, physiological change, whereby improving the tissue integrity. However, for the treatment to have a successful transformational<sup>1</sup> change; physical, plus emotional changes to the dog's perception must occur.

This is supported by Galen's anecdotal evidence, which has shown that the treatments, including Positive PACT® handling methodology, positively influences the dog's mood and emotions. These effects are both:

- Direct - from the hands-on manual application (using the skin as a conduit)
- Reflexive - through the neurological and hormonal effects of the treatment

However, these reflexive changes are further evident from how the dog is handled during the whole treatment process. This includes creating a 'safe environment', that will also help to initiate a positive perception for the dog, and the relationship thereafter between the Galen Myotherapy and the three participants, the therapist, the dog and the owner.

### **The importance of positive emotion in connection with enhanced healing**

The idea that animals feel similar emotions to us is often not given much credence, it is something that has been argued for many years. Charles Darwin discussed this subject with the statement:

***"To understand, as far as is possible, the source or origin of the various expressions which may be hourly seen on the faces of the men around us, not to mention our domesticated animals, ought to possess much interest for us."***

***Charles Darwin "The Expression of the Emotions in Man and Animals" (1872).***

Diana Fosha, Daniel J. Siegel, Marion Solomon stated, *'It is a scientific fact, and not just conjecture, that a series of cross-mammalian emotional systems has been revealed through animal brain research'. 'Just as emotionally traumatic events can tear apart the fabric of individual psyches and families, emotions can also act as powerful catalysts for healing.'*

---

<sup>1</sup>



POSITIVE P.A.C.T. IS A REGISTERED TRADEMARK GALEN MYOTHERAPY

Emotion is a complex subject within human psychology. A person's emotional response in association with healing, from a scientific perspective, is also still relatively new knowledge. Nevertheless, there are many studies that have proven a correlation between the positive human emotional state and enhanced healing. The paper in the 'The International Journal of Psychiatry in Medicine', as long ago as 1986 stated:

*'Enhancement of the immune system may be one link between anecdotal claims of relationships between an individual's being in a positive emotional state and healing'*

As we begin to understand animal's emotions, I would like to think that we have progressed beyond the French philosopher Rene Descartes who maintained that *'animals cannot reason and do not feel pain; animals are living organic creatures, but they are automata, like mechanical robots'*. Rene Descartes (1596 - 1650)

Jacky Turner and Joyce D'Silva stated *'.... but that is not to say there is no real difference at all between humans and other animals. There may indeed be a real difference in brain organization of emotion. If so, however, it is quantitative in nature and moderate in degree—not a qualitative or massive difference'*

Likewise, Elaine Stavert cited at a recent Dog Symposium in Norway (March 2018) *'Dogs have the same physiology as us, the same nervous system, the same brain, the same limbic system - the amygdala (memory and emotion areas) and therefore the same emotions'*. Elaine Stavert. Animal Therapy Works.

Therefore, within the canine, the same complexity and some of the same nonentities are still open to conjecture. However, many diverse human scientific discoveries have positively confirmed that the mind and body require this 'co-working' for effective transformational positive change. Therefore, as the canine is so similar within their neurology and physiology, is it such a big leap to believe that their needs for positive physical and emotional change are not hugely different from ours?

Likewise, the correlation between stress and the suppression of the immune system is proven and well documented; therefore, to provide a stress reduced, safe environment should benefit the dogs healing from the therapy.

There are theories that bonds between animals are built quicker, consequently the co-regulation may be easier because verbal communication is removed from the bonding equation. Therefore, a calm non-threatening environment will aid this bond, plus positive, calm co-regulation between all parties.

We build relationships with dogs through a variety of mechanisms; there have been studies to show that it is the way we speak can also have a massive impact on how animals interact with us. The tone and the way we talk, or prosodic speech is also important for the dog to connect with us. According to Dr. Stephen W. Porges, Ph.D when talking about human interaction he says *'talking is important but listening is vital...the reading of cues and responding to those cues, enables the body to restore the body to a state where homeostasis can be supported through reciprocal interaction, to help the rest of the body to support restoration and healing'*.

Within the human world Dr. Stephen W. Porges, Ph.D talks about co-regulating within the polyvagal theory. This is a neurobiological response, connects the brain stem via the dorsal motor nucleus. This vagal connection links autonomic responses to social behaviours, having sensory pathways and



POSITIVE P.A.C.T. IS A REGISTERED TRADEMARK GALEN MYOTHERAPY

feedback loops stimulated through facial and auditory cues. This neurological response could also apply to the canine, as it is a mammalian trait. If this is the case, it would include the dogs picking up cues from our facial expression as well as our tone and intonation of voice.

Dr Porges goes on to say, that *'from a primitive perspective, we need to mobilise to remove ourselves from the state of immobilisation when we are in a state that is in fear of our lives'*. Therefore, by allowing and encouraging dogs to move during the treatment process, facilitates movement and could help prevent escalation of stress, adding to a positive emotional experience. This could further aid recovery, plus a constructive link with the treatment and physical and physiological changes felt by the dog during and post treatment.

Co-working, to be successful, requires a multi-dimensional approach, including the provision of an appropriate environment, together with appropriate responses from the therapist or 'affecter'. With the affecter being an obvious part of the treatment, their emotional state should be such that it facilitates a dog to be able to co-regulate. The owner also should be part of this process of co-regulation by feeling involved in the process, even if that involvement is 'actively doing nothing'. In other words, being present but disconnecting from their dog for much of the treatment; this allows their dog to connect more authentically with the affecter. Their presence, however, is important, and the dog requires this non-therapist relationship, to facilitate an emotional validation of their choice-led participation with the treatment.

### **How the choice-led process presents**

The Positive P.A.C.T. ® methodology is based around choice-led treatment; the dog is made to feel comfortable in the environment and then positive intention is shown for the treatment to commence. The 'treatment zone' is the area that is the designated treatment area. This is selected by the therapist but is open to negotiation with the dog. The key aspect of this zone is that when the dog enters the zone (empowered consent) then treatment will commence; when the dog leaves, the treatment will cease until they re-enter the zone. (They will sometimes leave a limb in place for that to be treated in isolation).

When a dog leaves the treatment zone, the owner is requested not to give any instructions to the dog, it is for the therapist to request the dog to return to the treatment zone, or for the dog to voluntarily re-join the therapist on the treatment zone. This is where the true 'choice' is experienced by the dog. They will often show a comprehension of what is requested, but will continue what they are often doing, which is active sniffing. Intense sniffing appears to format a 'thinking' mechanism, a processing apparatus to consider returning voluntarily to the treatment zone for the therapy to continue. The active sniffing will be conducted within the benign zone which is generally the area directly adjacent to the treatment zone. There is one other zone which is called the 'neutral zone' and this is out of range of the treatment zone and away from the benign zone, this is where the dog goes when they are disconnected with the treatment. They can be disconnected because they have had enough treatment for that session, or they are finding the situation too difficult to tolerate, either physically or psychologically.

The use of treats or other forms of active encouragement from the owner, is not suitable, as this distracts the dog from concentrating on their body and how the treatment is affecting them. This type of distraction can prove to be stressful for the dog, as when it is removed, they can suddenly and dramatically become aware of the discomfort of the treatment. If they are allowed space and thinking time, they can feel in control through removing themselves (empowered withdrawal) from the treatment zone. Also, by having freedom of movement during the hands-on period, they can



POSITIVE P.A.C.T. IS A REGISTERED TRADEMARK GALEN MYOTHERAPY

and need, to observe the area of their body being treated, allowing an appropriate facial expression and body reaction, reflecting their own pain perception.

There are many nuances and phases of this form of handling within therapy, but it is all based around choice. Not all dogs react positively to this type of choice; often it is those that are accustomed to being told exactly what to do and when; or those whose experiences with handling have been negative. Of all the dogs treated with this method, around 90% respond positively on the first session, then grow in confidence within further treatments.

Those of us who have made these discoveries, such as Galen Myotherapist's, through empirical research, without defined scientific structure but based on quantitative studies of treatments, already understand and work with these connections, but to formalise this structure through applied studies will make the process easier to qualify and quantify.

Dr. Stephen W. Porges, Ph.D (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation (Norton Series on Interpersonal Neurobiology)*. New York: W.W.Norton & Co. Inc.

Kathleen M. Dillon Phd., Brian Minchoff, Katherine H. Baker Phd. (1986). Positive Emotional States and Enhancement of the Immune System. *The International Journal of Psychiatry in Medicine*. 1 (1), 1.

Diana Fosha, Daniel J. Siegel, Marion Solomon (2009). *The Healing Power of Emotion: Affective Neuroscience, Development & Clinical Practice*. New York: W.W.Norton & Co. Inc.. p. v111 & p.7

Charles Darwin, Phillip Prodger (1989). *The expression of the emotions in man and animals*. 3rd ed. Oxford: Oxford University Press. p.360.

Jacky Turner and Joyce D'Silva (2005). *Animals, Ethics and Trade. The Challenge of Animal Sentience*. London: World Farming Trust. 34.



POSITIVE P.A.C.T. IS A REGISTERED TRADEMARK GALEN MYOTHERAPY

# THE WHOLE PROCESS

## P.A.C.T. Approach®

*Progressive Affective Cycle of Therapy*

The protocol for Positive P.A.C.T. ®, from the meeting between the parties (dog/therapist/owner) to the end of the treatment.

For this process, the therapist will be called the 'affecter'.

**1. Sniffing within the treatment area.**

Allow the dogs their freedom to sniff and explore the whole treatment area.

**2. Talk to owner**

Connect with and change the biochemistry of the owner. Many first-time owners are nervous and this negative co-regulation effect on the dog will not be helpful. Therefore, comforting, honest, history taking, and discussion enables the owner to trust the affecter, co-regulating trust to their dog. (Everyone's biochemistry changes positively)

**3. Talk to dog not on the treatment area.**

It is important to initially establish a 'non-affecter' relationship away from the treatment area; this defines a clear 'start' and 'stop' to the treatment, through the position of the affecter.

**4. First invitation for the dog to join the affecter within the 'treatment zone'<sup>2</sup>.**

---

<sup>2</sup>



## KEY WORDS – glossary

**Active power base shift** – therapist goes from power to passive therapist inviting dog to leave and ‘try on new leg’ to enhance the physiological/physical and psychological changes from the treatment

**Active sniffing** – an intense sniffing by the dog of the surrounding area, giving them time to assimilate and process what the treatment will entail for them and their processing of whether and when to give consent for the treatment to the therapist.

**Affector** -a person who will have an influence on or effect a change in something

**Benign zone** - Benign zone, is anywhere within the treatment area apart from the treatment area, it is where the dog goes when they require thinking time; where they sniff enabling a psychological and physical connection with the changes from the treatment.

Biochemistry

**Passive relationship (therapist)** - the dog understands that they can stay or leave the treatment area because there is no clear intention from the therapist to actively treat.

**Checking-in** – a glance or look a dog will give their owner for emotional support and validation.

**Choice-led treatment (Positive P.A.C.T.)** – allowing the dog to be empowered to give consent of be able to withdraw from a treatment upon their own volition.

**Co-regulation** - the social relationships and the way one can adjust oneself when interacting with another, in order to maintain a regulated state. It is the building of a strong bond, that is developed when a relationship is formed. It enables arousal functions to be regulated through that relationship, both calming and exciting

**Co-working** - is working with the body and the brain

**Compassion/ Empathy** – a therapist’s compassion is one that is thought to be innate whereas empathy is considered to be more learned through personal experience.

**Empowered consent** – when the dog enters the treatment zone, understanding the demarcation, and consenting to treatment.



POSITIVE P.A.C.T. IS A REGISTERED TRADEMARK GALEN MYOTHERAPY

---

**Empowered withdrawal** – when the dog leaves the treatment zone, understanding the demarcation of where the treatment zone ends, facilitating taking themselves

**Human canine therapeutic bond** – during the PACT process, the bond between the therapist and the dog is something that grows exponentially.

**Interceptive awareness sniffing/ or active sniffing** - an intense sniffing by the dog of the surrounding area, giving them time to assimilate and process what the treatment will entail for them and their processing of whether and when to give consent for the treatment to the therapist.

**Neuroscience** - is the study of the brain and nervous system in both humans and non-human animals, and in both health and disease. The British Neuroscience Association Ltd. (2018). About neuroscience. Available: <https://www.bna.org.uk/about-neuroscience/>. Last accessed 29th June 2018.

**Neutral zone** - in a corner next to handler. This is where the dog will not interact with the therapist and the dog is encouraged away from the area as they switch off in this zone and is not a good thinking region.

**Non-therapist relationship** – also see passive relationship

**Owner passive** – the owner's presence is required for the treatment but for most of the treatment we do not want their active inclusion, often we do not even want them to have eye contact. However, with dogs that are used to having choice, their owners can offer reassuring eye contact or a brief touch or encouragement.

**Pain Elevation Indicators** – a series of behavioural signals given by the dog to indicate levels of acceptance of discomfort/pain perceived by the treatment given.

**Polyvagal theory** – a theory related to the vagal nerve and the two motor pathways that travel through the vagus nerve. Including sensory pathways in the brainstem regulation of the ventral vagus, to the regulation of the muscle of the face and head.

**Positive intention** – the therapist shows an intention to perform the therapy, through verbal and/non-verbal communication.

**Power Based Interaction/relationship – the passive relationship** – the subtle, yet tangible shift in the role of the therapist with respects performing the treatment; this is a vital nuance to facilitate choice for the dog. Power based is when the therapist will perform the treatment. Passive is allowing the dog to settle and 'give permission' for the treatment to begin.

**Prosody** - is the study of the tune and rhythm of speech and how these features contribute to meaning

**Reflexive** – an effect in the body that occurs indirectly from the main source; i.e. manipulation of a specific part of the body can create a hormonal effect of relaxation. These reflexive effects are mainly via the nervous and endocrine body systems.

This invitation is conducted mainly through a form of **positive intention**, a body language that would indicate to the dog that it should join the affecter within the designated treatment zone.

**5. The dog first joins the affecter within the treatment zone.**

It is at this point the owner should be passive and not interact with the dog at all, not even eye contact. Allow the dog to settle, standing or lying. Often a dog will get onto the treatment area and then immediately get off. This behaviour should be allowed with no restraints from the affecter or **owner** (physical or verbal).

**6. Dog joins affecter on treatment area.**

This could be the time when the affecter and dog share a physical connection within the treatment area; possibly, (if the dog is happy with eye contact) a **'Safe eye contact'** moment. Gaining a passive insurgence of oxytocin – both affecter and dog – both feel a bonding. If the dog is not happy with eye contact, a gentle, maybe, one hand contact would follow, to allow the dog to fully understand that there will be contact, **The human canine therapeutic bond – PART ONE**. If correctly delivered, it can automatically reduce anxiety of the dog – get it wrong and it increases the stress of the dog.

**7. Intention of a passive relationship (affecter).**

Create environment early on, establishing the relationship for the rest of the treatment. Aiming for a passive relationship, meaning, the dog understands that they can stay or leave the treatment area.

**8. Power Based interaction**

Change from passive interaction to a power-based interaction.  
(Most other practices do not have a passive stage); the difference with Positive P.A.C.T. ® is the variable power axis /balance between the dog and the affecter. For choice to happen there must be an initial and continuing **transitional interaction, from passive to therapeutic**. Only then can the **'choice' based treatment** begin.

**9. Verbal and nonverbal that invite participation**

---

**Safe Environment** - is not just a hygienic place based on appropriate noise levels, olfactory stimulation, furnishing etc but also needs the atmosphere and approach of the therapist from their first interaction with the dog and owner, through the whole treatment until the dog leaves (or the therapist leaves, if they are being treated in their own home.)

**Safe eye contact** - Gaining a passive insurgence of oxytocin through the therapist appropriately gaining eye contact with the dog.

**Treatment Zone** – is a pre-defined area where the therapist can approach the dog and perform the treatment. For the dog to move off the treatment zone is called an empowered withdrawal. See. Empowered withdrawal.

**Transformational** - according the Cambridge English Dictionary, means 'able to produce a big change or improvement in a situation'

**Transitional interaction** - the change in the relationship, between therapist and dog/dog and therapist

**Whole treatment process** is one that is to be described as Positive PACT, from the moment the dog interacts with the therapist to the point they finish and leave the treatment



Using appropriate words and maybe an appropriate prosodic speech; the affecter's biochemistry changing and indicating to the dog, inviting the dog to participate, is a biochemical and co-regulatory response between affecter and dog.

**10. Empathy and Compassion – two different emotions**

The dog accepts the hands because the dog and affecter contact create empathy and compassion (non-harming state of mind). The quality of the empathy could be dependent on the affecter's previous experiences, according to their limbic system and body budgeting system; at this point an understanding between the affecter and dog formed.

**11. "Interoception"** is part of the relationship because of the connections of the body and brain, and those responses. This is important for positive emotion and therefore co regulation, and bodily repair.

**12. Empowered consent** – is when the dog chooses to go from a power relationship, to a passive or **empowered consent**. **The human canine therapeutic bond – PART TWO.** A Dog will consent to your compassion – not to your power. At this point the affecter is holding this relationship on a knife edge, the human canine therapeutic bond. When the dog demonstrates empowered consent, through relaxing and remaining voluntarily on the treatment zone, that is the moment treatment can commence.

**13. Checking-in** – often the dog will just send a glance to the owner, as if to check-in and ensure their actions are validated.

**14. Freedom of Expression** – it is important that a dog can be free to observe the treatment and adjust their body to facilitate this.

**15. Pain Elevation Indicators** – these must always be observed during the hands-on treatment. These may range from the dog observing the area, resting their head on the treating hand of the affecter, yawning, lip licking, dilation of the eyes, flicking and blinking of the eyes, tension etc. These must be acknowledged and reacted to – either by moving, stopping, or just requesting a little longer on that region.

**16. Empowered withdrawal** – the dog is free to move off the treatment area and within the treatment zone, if they require a break or the treatment is too intense.

**17. Interceptive awareness sniffing/or active sniffing** – the dog then has the power axis and sniffs the treatment zone. **(This appears to be an intense and flat nose sniff, (possibly engaging the m. sternocleidomastoid muscle that I have found to positively affect the epithelium of the external nose surface, stimulating the mucosal cells.)** This interceptive awareness sniffing can take seconds to minutes; they may pause, look at the treatment area, consider a consent, then continue sniffing. They may even walk on and off the treatment area many times; this must be given full access, with the affecter remaining in a passive state.

**18. Active power base shift** – affecter goes from a power to passive relationship, inviting dog to leave the treatment zone and 'try on new leg', by walking and sniffing in the benign zone. This enhances the physiological/physical and psychological changes from the treatment.

**19. Empowered consent** – repeat from no. 12 onwards.

**20.** If the dog moves from the treatment zone, into the benign zone and then into the **neutral zone**, before the treatment has finished, they should be allowed to remain for a few seconds but actively encouraged (by a prosodic voice of either the affecter or the owner), to return to the treatment zone, or to the benign zone and then encouraged to return to the treatment zone.

**21. Reflexive effects** – often as the treatment progresses these affects can become more visible (i.e. hormonal, endorphin relaxation). This is a positive state for the dog to be treated but the treatment must continue using prosodic words and verbalising the areas and techniques that are going to be applied. This appears to keep the relaxed dog engaged with the treatment, still maintaining their power base but also allowing the affecter to maintain



POSITIVE P.A.C.T. IS A REGISTERED TRADEMARK GALEN MYOTHERAPY

theirs. This is a powerful stage whereby emotions and physicality of a treatment can be transformational as well as further developing the human canine therapeutic bond.

*The whole treatment methodology is also based on nuanced behaviours. These are specific actions, body language, or behaviours that are conducted by the therapist to achieve progressive affective cycle of therapy.*

**Positive P.A.C.T. ® = EFFECTIVE**

**BLUE – NEUTRAL ZONE**

**RED – BENIGN ZONE**

**YELLOW – TREATMENT ZONE**