Transcript: The Nervous System 101

This week, I am going to be talking about terminology.

The reason I am is that I have had, via a group that I work within, some inquiries about the terminology that I use in that I use the term “Central Nervous System coaching” - I speak directly to the central nervous system.

The inquiries were directly related to the fact that the stress responses *show* in a different system, not within the central nervous system, they show within the autonomic nervous system, which is part of the peripheral nervous system.

So what I thought I would do is in response to this, create a podcast that allows you to understand what these terms mean, and why I use the terms that I do.

If at this point, you're like, “listen, totally not interested” that's great, you get to skip this week……and if you are interested, then welcome.

It's not going to be a terribly long episode and I will attempt to make my answers as clear as possible, because I know that when we begin to talk terminology (and it's one of the reasons that I don't do it very often) it can feel really exclusionary.

People can use words, we can use phrases that are specific to a certain working environment that exclude people who don't know what those words mean.

Or phrases that can seem to carry emotional weight or seem to carry like a signature and if you don't know what that is, you may feel like you don't belong in the space within which those words are used.

And that is not the case here, you very much belong here.

Hopefully my explanation of these words will enable you to go into different environments with a greater understanding of them as well, and like I said, I'm going to try and keep it as simple and clean as possible to help you understand what I understand from all of the books in the literature that I have read.

So, ‘why’ do I use the term “central nervous system” coaching, as opposed to “autonomic nervous system” coaching or “peripheral nervous system” coaching or indeed “nervous system coaching”?

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The shortest answer is that I ***intentionally*** use “central nervous system” as a label of my coaching or teaching because I feel it is the most precise term for the area which holds the potential for a dysregulated human to learn and adapt their experience of activation to one that facilitates regulation.

Now that *is* quite jargony!

What it means is: the central nervous system has the brain in it.

When we require adaptation and learning like

- the skill of learning regulation, which is completing stress cycles, and understanding the activation that's within your body when you're triggered, for example
- initiating voluntarily the discharge of the chemicals, the hormones that are released into your body when you are activated, and then after the event, re-learning the meaning of the situational thing, the stimulus that created that response within your body,

All of that requires the capacity of the brain, it requires the capacity, the *adaptive* capacity of the central nervous system.

An adaptation is an effect of learning and doing different behaviour or doing a different thing- making the directive ‘mean’ different, so that your outcome is different.

The peripheral nervous system is a *communicator*, not a meaning maker.

Your **central nervous system** (**CNS**) has your brain in it, amongst various other bits and pieces - it's one of the two main divisions of the nervous system.

So there's the brain, brainstem, cerebellum and the spinal cord (the spinal cord is an extension of your brainstem-how cool is that?)

The **peripheral nervous system** the **PNS** is the other division and it connects the central nervous system to the rest of the body.

The job of the **peripheral nervous system** is as a *communicator*.

It brings data in, it delivers data in, and it delivers behaviour or motor responses out - all through nerve impulses.

The **autonomic nervous system**, (which is sometimes also known as the **visceral** nervous system and I have to say I quite like that).

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The autonomic does a lot of stuff without us thinking about it, it has our heart beating, it allows our eyes to blink if something puffs toward it. Digestion, for example, is not something that you have to focus on - all of these things happen below the level of consciousness.

When we talk about visceral, I like that, because that to me speaks very strongly to when you have a visceral response to something as if you really like something you really don't like something. So that speaks to me in terms of how the data that comes in, is interpreted within our body like this visceral data.

So the autonomic nervous system - ANS - is commonly regarded as a division of the PNS, the peripheral nervous system, along with the **somatic** nervous system and other subdivisions that I won't go into now.

And the autonomic nervous system also has some structural components that reside within the central nervous system.

So it allows the *communication* from data in the world to come into your central nervous system.

Some of the areas of the autonomic nervous system are quasi-autonomic, as in, we can voluntarily do something with them *with intention*, they can be intentionally commanded, for example, you can make a difference to your breathing rate.

But crucially, when you stop paying attention to it, when you stop intending to breathe in a certain way, your body does take over, you don't just then stop breathing.

Thankfully! I'm very grateful for all of these systems and processes that exist in my body without me ever having to take an exam to “get it right”.

So the autonomic nervous system together with the endocrine glands affect really important bodily function without, without an obvious involvement of the cerebral cortex.

And that's crucial!

The peripheral nervous system enables communication between the central nervous system and the body.

<u>It is the central nervous system that is the meaning making commander of the nervous system.</u>

The peripheral nervous system is data in and data out.

Now the whole nervous system is gloriously interrelated, but, again, *it is the central nervous system that determines the meaning not the peripheral nervous system* (or if

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you want to get more specific, the autonomic nervous system, or indeed the somatic nervous system)

BUT for sure it *uses* data that comes through the other nervous system channels.

And I, in my practice, I use sensory input into these channels as release techniques as somatic engagement.

But it's the central nervous system, where we can change the meaning of inputs of data and therefore, in that, in that interpretation stage, as the data comes in, (it could be exactly the same data that triggered you in a different period of time).

If it means something different than it did before, (and that happens in your central nervous system), then the behaviour response (the request from your central nervous system for a certain kind of behaviour) the *output* of the interpretation of that data will be different.

So the autonomic nervous system, which is the sympathetic nervous system, the parasympathetic nervous system, and the quasi autonomic nervous systems that I mentioned before is the enteric- it receives data from two different sources.

It receives data from the **outside** world, in terms of the peripheral nervous system touching heat, you know what, what happens out there?

All your senses, what you see, what you smell, delivered via afferent, ‘A, F, F, E, R, E,N, T’, or sensory nerve impulses, and that comes down to the central nervous system.

Okay, so it's data, just data.

And it also receives data from **internal** signals.

So your autonomic nervous system is activated when you feel a strong emotion, which is why you can imagine danger or you can watch a horror movie, a scary movie, and your stress responses will be observable, will be experienced, your autonomic nervous system will react.

So in that, we see that not only is the autonomic nervous system bringing data in receiving information from the external world and from internal signals, neurotransmitters and whatnot, but it then passes the 'respond' out.

So it is the respond mechanism, i.e. your stress responses.

They are the symptoms, they are the responses to activation, and they are enacted *through* the channel, they are communicated through the channel of the autonomic nervous system.

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This could be somebody jumping out of a wardrobe (I use this example a lot I should clarify, I don't have a lot of people jumping out of wardrobes!) let's say somebody jumps out of a wardrobe and your heart rate increases, you know, you're startled, you're shocked your heart rate increases, your breathing rate will increase, you might get flushed, you might feel tension in some muscles, you might feel shaky when you realise that actually, you're safe.

That is your **autonomic nervous system** having communicated to your body what the appropriate response *at the discretion of the central nervous system* should be in this certain situation.

But the **autonomic nervous system** doesn't have any control over this data, the data in the data out, it is simply the communicator of it.

Now, in the interest as I always have of removing value hierarchy, the job of the **peripheral nervous system**, the **autonomic nervous system** like that, there is no one part of the nervous systems job that is less vital than the role of the central nervous system. They are all important, **but they are functionally different**.

So I specifically use "**central nervous system**" as my directed area of coaching and teaching because I feel it is simply the most considered term for the area that has the potential to impact the symptoms of stress response.

Whether a stress response is required or not is decided in the central nervous system.

Coaching to the central nervous system like this doesn't invalidate or ignore any of the other nervous systems, it doesn't invalidate or ignore their functional requirement, the nerves that exist there.

It doesn't require, it doesn't invalidate or ignore.

This is not a value based, hierarchical distinction of the parts of a nervous system, but it is a, a gentle, teasing open of an interconnected system of intense beauty and fierce love that's evolved for our human survival, that's intended to serve.

I've studied both formally and, just for the love of it, for the continuation of professional development, I've read so much literature that confirms what I have just expressed to you and (understanding the natural confirmation bias of the brain where we seek out information that confirms something that we already believe) I have also spent time trying to find literature that has a different interpretation of similar studies - different opinions.

So what I expressed to you here is *my* considered opinion, it's *my* model to aid both my understanding and my clients understanding.

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It's *my* choice of label based on a wide range of studies of both quantitative and qualitative evidence. And this is just *one part* of my integrative coaching practice.

But it's a really important part.

Because if your CNS is activated, and you have not learned the skill, (or rather, you have not UN-learned, the socialising, that prevents you from remembering the skill) of regulation, then all of the other areas of mindset coaching, for example, well, it's like putting a seed on a ground that has no facility to allow it to take; a ground that is hard and potentially has not got the stability to support the growth of the seed.

Mindset work, which is amazing, and such a wonderful tool, requires a *regulated* body, a regulated central nervous system, not a regulated *peripheral* nervous system, because you can't regulate something that has no learn/adapt capability (and in everything that I've read, the autonomic and the peripheral nervous system has not got an independent learn adapt capability, outside of the central nervous system).

It is the central nervous system, that is, I'm about to say the brains of it, haha but it's ***literally*** the brains of it.

This is a significant part of my coaching practice.

And I care for it deeply because of the impact that it makes within a human's life.

How each of us experience life; through our physicality; through our lived experience; through our culture; our inheritances - **all** of that, it makes us entirely original.

And that's a beautiful thing, a really “to be treasured”, beautiful thing.

And because of that, it's inevitable that my method of coaching or my method of labelling, or my method of being me, is not going to resonate with all humans.

And that's okay. I don't love it.

I would love to be loved by other people, I don't love it when people are not resonating with my work or not resonating with me, that's, you know, that's not my fun space to be… but I accept that it happens.

I'm not attempting to convince anybody that my opinion is, “the right one”.

I believe it to be true.

I believe it to be serving and helpful.

And I am happy to share my opinion on this for clarity, and for transparency and to support the existence of a multitude of different personal opinions within a community

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within my community without requirement for exclusion or arguing.

Discussion is wonderful.

But I say again, I've read people who disagree with me, or people who disagree with this opinion, and I've read people who agree with this opinion, and I've read the grey area in between, this is my *considered* position.

If you don't resonate with it, or with my choice of linguistics, or if you find another model or a different label, more serving for your own personal development, I wholeheartedly celebrate your self trust, and the knowledge that this shows.

In addition, I find that when I'm curious, when I'm open minded about what doesn't resonate with me, it is often a guide to what does.

And that's a great thing to facilitate.

A human discovering paths back home to themselves without the dogma of right or wrongness, but rather with a version of self-trust, and “this serves me or this doesn't serve me” ness...ness? (laugh) and this is always going to be bespoke to every single human… that's something I champion, and I am deeply proud to serve.

There is a lot - a lot, a lot, A -LOT- of literature out there in the world that you can look at, you can make your own opinion from; my thoughts are that humans who are curious enough to find out will find out that will make up their own opinions.

And it's important to read not just things that confirm your position, but something that contrasts as well so that you can find yourself in a balanced place where, as I am now - I'm sharing the impact of adapted knowing within the central nervous system of neural learning and discharging, where I am talking specifically to a central nervous system and some people disagree with the fact that I should be using that labelling - you will find yourself when you have read widely on a subject should you choose to do so, that there's no need for defence, there's no need to convince.

There is information out there, and this is my interpretation.

It's my considered opinion, based on the evidence that I've researched.

And it's okay if people disagree with me. It's really okay.

My aim is to allow understanding of complex subjects without all of the words that I've just used in this podcast, which while they are scientifically accurate, can exclude.

So I will continue to use the term central nervous system; coaching central nervous system clinic; I will continue to use that phrase.

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I hope this podcast helps you understand the nervous system generally, but also why I use that.

The impact of adapted knowing, perception, neuroception of neural learning and the discharging of activation, inevitably, is felt within the whole body system.

In my experience we don't work in one area of the body or the brain without impacting another.

But I want you to know what you're getting when you come to me.

What I don't want to do is tell you, you're coming for a full body massage when actually I just do back and shoulders.

And if I call this ‘nervous system coaching ', that doesn't align with me, because it would feel like I am telling you, you're coming for a full body massage.

But actually, I'm working with your central nervous system, I'm working with the meaning making element of the nervous system, not to belittle or dismiss any other element.

I want to be very clear that you're coming for “back and shoulders” (laugh).

Because if you turn up for a full body massage, and I just give you back and shoulders, you're going to be pissed, or at least *I* would be pissed.

But if you want to come for neck and shoulders, then you come for neck and shoulders AND your whole body benefits.

I trust that this podcast has allowed you a little window into a subject that you may or may not be very familiar with.

I trust that if you want to know more, you will find out more.

And I trust that if you do you will read contrasting interpretations of similar material.

And should you fall in line with my way of thinking? Wonderful.

But if you don't, that's okay.

Then simply ask yourself a question of: are you benefiting from my work or not?

Is it serving you or not?

I have multiple mentors.

I don't agree with everything that they say.

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It doesn't impact the amount of value I receive from being in their presence for being in their programmes.

It's entirely up to you.

You get to make your choices just as somebody gets to believe that… God exists.

Just as somebody gets to believe that we're descended from aliens, just as somebody gets to believe that dogs are better than cats.

Science, don't forget up until the 1990s didn't have a map of the nervous system that wasn't based on a natal male's body.

Just think about that. So science is always changing.

That's why it's so important for *you* to have *your own opinion* on these things, and not just be led by the nose.

I think it was in the 1980s when there was that big Sugar Fat war.

Like some sugar company PAID scientists to produce papers that said that sugar was good for you.

Now, I'm certainly not saying that that is what's happening now, what I am saying is ***please*** engage your sovereignty.

When you are reading papers, when you are reading opinions, you get to have your own.

You certainly don't have to share mine.

You don't have to listen to me at all. Listen to *yourself*.

You will know if you are trying to convince somebody that your own position is unstable.

You will know if you are having your lived experience dismissed, that you are accepting somebody else's version of your reality.

You always get to have your own opinion, always, no matter who shares it, who doesn't, you never need to share it if you don't want to.

This central nervous system work is part of the foundation to enable you to feel safe enough to have your own opinion, which is kind of ironic, really, isn't it?

So listen to this over again, if that would help you.

There's the transcript if you would prefer to read through something, if that is more

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accessible for you.

But from everything that I have learned, I'll leave you with this:

UNLEARNING the interruption that socialisation has embedded within us, the interruption of central nervous system regulation, appears to be needed to allow humans to experience and learn from chosen activation and unchosen activation, to recover from it, and therefore to learn how to sustainably move in the direction of their dreams.

If you can find that for yourself, wherever you find it, if you can find that regulation, pay attention.

Caring for yourself in that way, will open up your future to one that has much more choice in it.

Take what works from whoever it is that you're listening to, and leave the rest - not like some of the stuff's good, some of the stuff's shit, but everybody requires something different, everybody is different. That's the beauty of the world.

You don't need to conform to somebody else's way of thinking, to benefit from *some* of their ways of thinking.

I really want you to be able to move in the direction of your dreams.

So whether that's through work that I provide or that somebody else provides I, I love you and I want you to *serve yourself first*.

You have permission to not listen to this podcast and not involve yourself with any of the work that I do if it serves you - I mean you have permission to do that whether it serves you or not, of course (laugh) - but, **care** for yourself.

What resonates for you? Leave what doesn't.

That's okay.

I'll speak to you soon.

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