Training Call #5: ANS & Self-Regulation Review, & The Two "Ceptions"

Okay folks, I don't even know what day it is. It is the 22nd of April. It is the year 2025, and we are on training call number five, cinq. For those that know French. And obviously all these training calls build upon one another. That being said, they also have their own solo theme. And so today it is all about the autonomic nervous system, our autonomic nervous system. I'm going to do a review of that, and self-regulation, some review of that. I'm going to read a little bit from this. Wonderful. In some ways I call this a textbook. It's called Nurturing Resilience. It's on the book list on your additional resources, Nurturing Resilience, Helping Clients Move Forward from Developmental Trauma, an Integrative Somatic Approach. This is co-written or written by two of my mentors, Kathy Kain and Stephen Turrell. Also got to give them props. I would say that even though this is meant for practitioners, it is probably the best textbook for breaking down a lot of the elements that you are learning in SBSM.

So it's a good addition, a complimentary book also to polyvagal theory. So for those of you that want to dive deeper into Stephen Porges' work, I recommend this, sorry, Stephen, over his textbook, which is filled with science and a lot of jargon that even I struggle with a little bit these days. But this really outlines the nervous system beautifully, the polyvagal theory, and we'll go over a bit of that today. And the other thing today is we're talking about the two sections. Who knows what those are - the two sections? This is my own way of talking about neuroception and interoception. These are words that I mentioned before, but we're going to review them again, and I'll read some passages from Kathy and Steve's book. Okay, so quick one, on page one here of the handout. I always like to just remind you, review, watch, if you've gone through biology of stress, video number three, which I think most of you have by now, that's Vagus 101.

That's a review of what we're going to do today. In all my years of teaching and now teaching people at higher levels, I cannot stress, in a good way, the importance of reviewing the basics over and over and over again. It seems remedial and it seems, sometimes, maybe like a waste of time. Why bother? But what I've learned and what my students have learned, and all of you alumni here, is that when you review something a second time, a third time, a 10th time, for some of you a hundredth time, you are different. And so your capacity is bigger. I see some nods from the familiar faces. Your capacity is bigger, which means there's going to be another

level of nuance, another level of context. You might have a memory spark in the theory that wasn't there to begin with when this was first on your radar. So this is why we encourage repeating not just the theory, but the audio lessons, the recordings. It's the same reason you don't just go for a walk once a day in your life.

You don't go to sleep once, you don't brush your teeth once, you don't make a healthy meal once. We do these things over and over and over again, and that's what builds the foundation. So just a little hit of it is good to review, even when it might seem like it. Having that beginner's mind is so key. And that brings us back to little ones. We're going to talk about self-regulating today, co-regulating when we're infants, when we're young, when we're children, everything is new. Everything is a new day, new experiences, new sensations. And so as adults, we want to put ourselves back. People often say, look at things through a child's lens, right? We've heard that saying before. It's the same with the nervous system work. So before we get into the theory, let's take a second. I'm just going to do a little quick, quick yet potent connection. Point to some of the basics. Our old friends of connecting, maybe to the ground under you, so that space under you, whatever it might be. For some of you, it might be the chair you're on.

For some it might be a couch that you're resting on. Some of you might be listening to this on a walk. If you're listening to this as a recording, maybe you're lying down either on the ground or in bed. Is the surface you're on firm or is it a bit softer? So notice these things and as you bring, draw your attention to that surface or the surfaces, because there's probably more than one. See what you notice next. So rather than me giving you the thing that you notice next in your awareness, whether it's external or internal, just see where your focus goes and then, where does it go next?

And even if we just do this to pause and let the system find a moment of really not having to do anything except notice the current moment, and then the next moment, and then the next. Because once we notice the moment, it's already over. How is your breathing? How are your eyes? Are they open? Are they closed? Are they alert? Are they tired, that they want to rest, or do they want to engage? So follow your impulse. One of our other key basics. And let your eyes do what they want to do. How's your breath? That inhale and exhale.

So how does that part of your physiology feel,, or how does it shift as you shift your focus and attention? For some of you, it's the end of the day. For others, it's the beginning of your day. For some it might be midday. And then of course for those on the recording, the same thing, could be different times of day. So for some of us, we've used up some of our energy already,

and for others, we're just getting started. So since also, any impulse to move, to make yourself more comfortable, as you notice some of these pieces, do you feel any tension that you weren't aware of before? Is there a need to move or stretch? Someone just said, keep yawning.

Just tune into those little pieces that start to bubble up in your awareness. And maybe you are already in a state of good awareness and paying attention to things, as you're learning more how to stay in that process of being embodied, and also in connection with the environment. Those are the two pieces we're really working with here. If we were to simplify the thesis of SmartBody SmartMind, it's to learn how to reconnect to the inside and learn how to connect to the outside at the same time. And then all the other pieces inside are extras, extra layers, extra things to notice, and then doing our best to be neutral. I'll say that one more time. Doing our best to stay neutral in what we notice.

And so with that said, let's get to the first little bit here on page one. Again, this is training call number five. I'm going to do a recap of our nervous system, a recap of the nervous systems. Because in order for us to sense our internal and sense our external, that is a process of working with our nervous system, whether we know it or not, that conscious effort to pay attention is bringing us into our physiology. And that's what we're doing here. Very different than moving through life and not ever considering that we have not only a nervous system, but bones and muscles and skeleton and adrenals. And even though we know we have this brain, we rarely think about it. There's a thing inside this skull that does so much for us. So we'll cover this briefly. So, the first line there, two is the number. We have two main nervous systems. Invertebrates, we're those people, we're those animals. We have a spine, we've got vertebrae. If you don't know your anatomy, they're those little bony things that line up, that create your spine.

And within that is our spinal. So we'll get to that in a moment. So this first nervous system, not that one is more important than the other, but the first one there is central, central nervous system, meaning center. So the central nervous system is the brain, that's the next line, and spinal cord. So we've got our brain that's housed within our skull, and then we've got the connection between the brain and the spinal cord through the brainstem. And if you want, you can even say hello to your brain by touching, hello. And then that spinal cord goes all the way down to the tailbone, what we would call the coccyx, the end of the spine, which is quite deeply embedded in our pelvis.

So we've got this central nervous system, brain and spinal cord. Number two is the peripheral nervous system. So, peripheral, it's like that concept of peripheral vision, right? If you're looking straight ahead and you bring your hand in front of you, there's a moment where you can see it without having to look. So the peripheral nervous system is everything that comes out. Everything meaning nerves, the nerves that come out of the brain and the spinal cord. So if anatomy is something you're interested in, it's super easy to go online and just look up the peripheral nervous system. You'll see all these things, these nerves coming out of your brain and spinal cord.

The brain has what we would call cranial nerves. The vagus nerve is a cranial nerve, and then out of the spinal cord, all the nerves that allow us to move, allow us to digest, walk, talk, function, et cetera. So the peripheral nervous system is the autonomic nervous system. Next line down, sorry, next line down. So everyone's always talking about the autonomic nervous system, and it's important. That's a big focus of our work. But interestingly enough, what we're really working with in SBSM is the peripheral nervous system through movement, through touch, looking, connection. Next one, and the somatic nervous system. So between all these nervous system branches, so we've got the autonomic nervous system, and the next one down is the somatic nervous system.

So between all these nervous system branches, our pathways, sensory and motor that communicate, that's the next word, communicate signals, sensations, stimuli, hormones, all of the stuff, it's like this massive highway. If you think about big roads and highways and things coming off and things coming on, and all these little side roads, I was just driving in Europe and in the UK, and it's so different from driving in North America. Those of you who have driven on both continents, you know how different it is. And in the UK or in Europe, obviously there's big highways, but there's also these little ones. So many little roads, right? Poor Seth isn't good at driving on narrow roads. He's like, this can't be real. There can't be two cars that go on this road, like, oh, this is a road for two cars. And as you drive across the bush and the trees, you wonder if you're doing the right thing. But that's how it is. So if you think about all the different roads that humans have built in the world, that's how your nervous system is with these branches and all this stuff moving around.

So again, between all these nervous system branches are pathways that communicate signals, actions, and survival. So, so much communication. And the cool thing, why it's automatic, and autonomic, is we don't have to think, heaven forbid we had to think about asking our system to secrete things when we ate a sandwich or we have a drink of water, that would be impossible.

We want these things to happen automatically. Someone says, come visit Israel and I'd be happy to drive you around. I love driving on those roads, just for the record. So some of you know I like to drive. I really love driving the curvy roads, just for whatever reason. So it's fun for me, not so much for my husband. I think there's a reason that only Formula One drivers come from Europe and South America. No one is from the United States or Canada, not yet, not now at least, it's all Europeans and folks from the UK. So anyway, I digress. So, the next line down has two main branches, plus its sub-branches. So this is going to be a total review for everyone, I think. First line, sympathetic nervous system, SNS. That's our fight and flight survival system. So that's the first two words.

Fight flight, governed by our autonomic nervous system, parasympathetic nervous system, which is for our slowing down. So that's the two words there. It's our slowing down survival system. So we can think sympathetic as get up and go, parasympathetic is slowing down. Now of course, as you're all learning, there's different branches to this parasympathetic nervous system. The PNS, short for parasympathetic nervous system, is broken into two more branches. So the first one we kind of call it, me and my colleagues, it's speedy, but it's primitive. It's unrefined. The fancy technical term, it's unmyelinated. Unmyelinated means the nerves of this nervous system don't have this fat, healthy, fat sheath around to make the conduction go smooth. If I use the example of driving on a freeway, having a car that has really clean fuel, that has all the bells and whistles, that has proper brake control, you can zoom, and then stop with ease.

Think of a car like that. That would be this, sorry, got mixed up there. A smooth car would be the next page. An unrefined car, which we're talking about, now that would be a clunky vehicle without refinement. It still has the engine, it still has the capacity to go and stop, but it's jarring. It's like a big truck, an old truck that doesn't have a lot of refinement. It goes, but it's not refined, right? So this speedy, primitive, unrefined nervous system, it's the shutdown nervous system, shut down nervous system. This is part of the vagus nerve called the dorsal vagal of the PNS. So it's unrefined. Apologies for that mix up there. Page two, top of the page, steady, refined. Now again, this is the other branch of the parasympathetic, steady, refined, myelinated. This is more evolved. This is where you would have that fancy sports car that has refinement gears that are super smooth, all these sorts of things. This is a more evolved, calming down nervous system. Those are the words, a calming down nervous system. And this is what we call the ventral vagal complex of the PNS.

So parasympathetic has these two branches. One is unrefined, clunky, but fast, can shut the system down really quickly. And then this other one is more steady, it's more refined. It's that smooth sports car, more evolved, and you can slow down much more refined, more intricate. There's more dexterity to it. And that's because of the myelination, the smooth fatty layer over those nerves. It allows the conduction to be much cleaner and smoother. So that is the PNS, broken down at the first level. But then as you see on the page, here's where it gets more complicated. So this dorsal vagal complex that I just mentioned, these two branches, the clumsy and unrefined portions of the dorsal. So this clumsy has two other branches. So think about now that part that has no myelination, it's clumsy, it's fast, it shuts down. There's two modes that it operates in. So this is the part that often gets missed in a lot of talks on the nervous system. People will often say parasympathetic as rest digest, sympathetic as fight flight. That's somewhat true, but here's where we go a little deeper. So the first word, there are two main modes. It operates in the first one, not meaning it's more important, which is how we have to speak in English language. The first one is called low, low tone dorsal.

And then the second word under that is high, high tone dorsal. So the way I like to describe this, if I use the car example, since I have, if you have a car with an engine, it has different gears, for those of you that drive standard, which for those of you in Europe, most of you here in America, no one really drives stick. But in Europe you have these gears, but it's the same engine. First, second, third, fourth, fifth, maybe sixth, reverse, neutral in the middle. Think of this branch of the parasympathetic, the vagus nerve, like that car that has different gears. So low tone is a certain “gear” of this part of the parasympathetic nervous system, of this part of the dorsal vagal complex. One gear is low tone dorsal, another gear is high tone dorsal. So I'll keep going, low tone. Next line down is the true rest digest.

It's the true rest digest, parasympathetic nervous system and is responsible for recovery. That's the next word, recovery and healing of the body's many organs and organ systems. So if you think about this from a metaphorical perspective, you don't want the system to be revving at a high tone. When we're trying to digest food, when we're trying to chill out and heal, we need to be in that calm, chilled out, we can go to sleep mode. That's why we know sleep is so important. When we go to sleep, we want to be in this low tone dorsal of the parasympathetic nervous system that allows this recovery and healing. The next four lines, I'll go through these because it also does this. It supports tissue repair. So that's just a fancy word for all of our cells, our skin, the lining of our gut, our hair, our nails, anything that needs to be repaired, anything that is tissue, layers of our body, it needs to be repaired.

You get a cut, hopefully it clots, for most of us, that happens. And then you see the stitching up, right? The way a cut heals. It isn't just the next day, all of a sudden, miraculous. Like in science fiction movies. You have a moment where there's inflammation, it stitches up, it scabs. There's also a point in time where it's a bit more vulnerable. We all know this. I have a bandaid on my finger right now because of something. You need to cover it up so it doesn't keep opening up, but it's this low tone dorsal of the parasympathetic that drives that healing. Now, as you know, when we have too much fight flight of the sympathetic and too much of the other dorsal, the high tone dorsal, which is shut down, robs our body's ability to do this tissue repair. So when we are well and healthy, our wounds heal a lot faster.

Children's wounds, because they're so young and they have youth on their side, typically they heal really quickly because of that, as one example. So the next line down, so that was, supports tissue repair. Next one, immune system response, immune or immune system response, our immune response, our immunity, our ability to draw in the various cells. Typically it's the white blood cells, the T cells, the killer cells, the cells that go foreign, foreign and foreign. That's not good. We don't need it. Let's chomp it up. Let's eat it up. Let's recognize, that shouldn't be in there, and we spit it out. That was a very crude example of immune system response. But that's what happens, right? And so when we have good low tone, dorsal rest, digest, our immune system, doesn't mean we don't get sick, but we can recover a lot quicker if we do.

Again, as many of you know who are working on healing your nervous system from a dysregulated to a regulated, when you're in a more stressed state, you're more prone to getting sick. You don't have the same recovery. Your immune system doesn't feel as strong and as robust. So this is where that comes in. This is where the whole concept of what we might call autoimmune comes in, where the immune response is seemingly extra than it should be. So it can go the other way as well. This is where cancer comes in. We all have those cells. The system can turn on or turn off it, just whether or not the system is ready to fight, what it needs to fight and not fight, what should be there.

Next one down, barrier keeping of the gut. So barrier keeping of the gut. That's the word there. That's a fancy way of saying stitching up the lining in your gut. The gut is a very porous, delicate structure. And as we eat, as we process, things break down every night, what occurs is this gut surface repairs. Think of little needles stitching up all the linings. And so this is where someone, say, the leaky gut concept comes in. If we're not getting a good rest digest, our gut is not recovering at night. This is also why people say every now and again, it's good to lower our

food intake. This is where good fasting, people who fast, and I don't mean every day for your whole life, but moments, even religious holidays encourage fasting. Right? Now, I don't have an understanding of why that is in, say, religious faith.

But if you think about it, it's kind of smart. Every now and again, you take a break, you let your gut repair, you give it a break from foods, you might have more simple foods, and it allows the system to have a time to recover. Just like you don't want to be running a marathon every single day, your system will break down. You need to give your brain a chance. Sometimes if you're thinking and doing and communicating, you need to take a break. It's the same with the gut. So I'm not saying go and fast, but cultures, traditions that do that, it is a very good way of letting the system have a bit of a rest and let that gut repair. That being said, we still want the gut to repair even when we are eating at night every day, that's its job. It's also when the system is in a good state, it allows nutrition, nutrients, micronutrients, vitamins, minerals to be properly absorbed from the small intestine into the bloodstream, which is how it works.

So again, this all is in service of tissue repair, immune system response, because we need those nutrients, vitamins, minerals, et cetera to drive tissue repair, cell response, et cetera. And then the final one, cell repair and regeneration, which in some ways one could say is all those three things, our cells are repairing. We need to regenerate. We want to produce new blood cells every day. This is a process that keeps us going, and decline occurs when these systems don't work optimally. So next line down, for health healing and our smarts to be restored. That's my way of saying our brain, our thinking, our mind. We want all three branches, all three branches to be in sync with each other. So the low tone, the high tone, also the sympathetic, right? We want the sympathetic nervous system online. When we need to fight, when we need to flee, we want to run up those stairs, do exercise.

We need healthy sympathetic as well. Alright, next question, not next question. Next layer here, and I just caught something here. Someone asked, what do you do if you can't get more than an hour of deep sleep and less than 10 minutes of REM? What I say is keep working on your regulation. In other words, kind of the blanket statement that I might have is the more regulated we are, the more capacity we have, the more able we're able to tune into our somatic system, get out of our mind, get out of survival stress. All these things are going to contribute to us being able to fully rest at night. The piece around being able to sleep ties deeply into our ability to feel safe. If there's a part of our system that is constantly on alert, even though we know technically there's nothing dangerous around us, it's very difficult for us

to drop into that deep sleep, because something is always waiting for that penny to drop, right?

That saying. So again, get what you can, take time in your day. So often people, they get to night and then they're like, okay, now I'm going to do all my calming routines. Now I'm going to have my herbal teas. Now I'm going to have my bath. Now I'm going to tune in and breathe. Do the breath exercises. What I often suggest is, how can you do those during the day, so that your system isn't always stuck on that high alert, so that it's aware that it can come down. And what often occurs is we, does anybody find this? If they have trouble sleeping or a string of difficult sleeping? You get worried as the night approaches, right? Get worried that you're not going to sleep. And what does that do? The brain feeds the nervous system. Someone is giving me a good description, there on screen.

And so that's where our mind can play tricks with us. This is where the real concept of mind body comes in. So how can we train ourselves and teach ourselves and wire new patterns that we get used to coming down, not just at night? That puts a lot of stress on the system. All right. The other thing I'll add about sleep, typically, typically, this is general. In our very sedentary lives, which many of us have, we often aren't exhausted enough from daily movement. Now I don't mean you have to go and run marathons and be in a gym for five hours, but daily physical activity is important, as is getting sunlight. The sun on our skin produces what's called melatonin, and then that gets released at night for us to sleep. So again, this idea that we have to stay out of the sun I think has been miscommunicated.

We need that sun, even if it's not direct sun, even cloudy day sun is good for our skin. We need that on our skin. And then the other thing I'll mention, this is a little out of scope of SBSM, but I've done many interviews with folks who talk about the importance of circadian rhythms and not looking at blue light at night, not having LED lights around us in the evening, at least two hours before we would want to go to sleep. So that the system goes, ah, it's bedtime, but if we keep all the lights on in our house, it literally, the brain thinks it's daylight, it's the day, it's the sun, and it keeps us awake. So having your space as dark as possible is also very important at night. At night. All right, next line. So the two ‘ceptions’, let's get into these. So the first ‘ception’ is interoception.

On page three, we have the next ‘ception’, not in order of importance, neuroception. So I'm going to read a little bit from this book, no point in trying to recreate what they say so well, and again, if you want a good book, a good reference, I recommend this. I’ve got to put my

glasses on. All right, so this is from chapter two from the book Nurturing Resilience, and the chapter is called Knowing When We Are Safe. So in many ways, neuroception and interoception, they intertwine, because one feeds the other and vice versa. So this is interoception. This is page 26. So, ”Interoception is the process by which we notice our internal state. We evaluate a combination of sensations and perceptions of physical processes to assess our interior milieu and decipher what it's telling us about what we are feeling, how we are, and even who we are.”

“This includes our perception of physiological processes such as heart rate, digestive processes, sensations on the skin, and other internal experience sensations of our own bodies. Using our evaluations of these sources of bodily information, we take action, make meaning, make predictions,” and then they have in brackets, “like predicting our own illness by feeling the initial sensations associated with the onset of say a common cold and make judgments about who we are, how we are. Are we hungry? Are we safe? Are we loved?”

So this example that Kathy and Steve give about getting a common cold, you kind of know it. You feel that scratchiness in your throat. You then go, oh man. And then you might feel a little hot like, oh man, fever, that's important. It's going to help me come through this. But one of the things that is important is when we feel these sensations, we want to try to, this comes back to the sleep piece, not get worried, because the moment we worry, we're basically worrying about our internal process.

And so yeah, that kind of sucks. And what I've noticed as I have gotten more interoceptive and more accurate is when you are more refined and feeling the onsets of those things, again, you have to do the work to follow through. You might then go, I need to take a bit more of a rest. I'm not going to push through today. I'm going to do more low tone, dorsal stuff. I probably haven't been eating the best. All these things. And often we can geek out, we can get rid of these symptoms by taking care of ourselves. Typically what happens is we, again, I'm being general, we push through, we override, I'll be fine, I'll keep going, I'll rest later. And then that's when, to quote Gabor Maté's book, When the Body Says No, the body says, Uhuh, we're going to put you in bed for a few days and make sure you rest.

So these are the little pieces that are common day experiences that we don't think of, but that's an interoceptive capacity, just like going kind of hungry, or I'm thirsty, or I'm tired, or, Oof that food didn't go so well in my body. Maybe I should throw that out. Maybe it's gone off, maybe it's gone bad, et cetera. So continuing here. So, Stephen Porges, he's the guy that

founded and discovered the different branches of the nervous system, specifically the parasympathetic, refers to interoception as, “The infant's sixth sense. If an infant cannot accurately perceive whether or not he is hungry or thirsty, if he needs sleep, if he is too warm or cold, then he cannot accurately communicate his needs or distress to care providers. That in turn can prevent care providers from responding properly to the infant's needs, which then increases the infant's distress and instills a feeling that safety and connection are lacking. In this way, it is critical that the infant and small child develop an accurate interoceptive language for communicating her most basic needs to care providers. It's an essential component of healthy attachment and bonding processes. As the care provider meets the needs of the infant, attachment is strengthened.”

So now my commentary for a moment, this is why at the beginning of SBSM, we're always, or I'm always, and the moderators are reminding you, how can you follow your impulse?

Do you have to go to the bathroom? Are you hungry, thirsty, all these things, while that's not happening with you as an infant, because we're not infants, and we can't go back in time, not least that I know of, you are doing that for yourself now as an adult. So you're strengthening that interoceptive capacity now as an adult. And if you did not get that, which for many of us might not have occurred, that healthy attachment, that accurate sense of what's going on, we do it as adults. It's a little clunkier because we have years for some of us, decades and decades of wiring, of ignoring those impulses.

For some of us, our impulses might actually be so loud and obnoxious due to say, our sensitivity, and that's okay too. Sometimes we have to be like, Hmm, that's an impulse, that's a signal in my body. But actually, and this is where it gets, I will admit this can be tricky. That is not to be paid attention to because that's not accurate. We see this a lot with folks who have trouble with knowing when to eat, when to stop eating, how we relate to food. And it makes complete sense because that's how we are soothed as babies at the beginning, is through feeding, right through the suckling. That is basically what we need from the beginning for a long, long time, we need to be given food, we need to obviously excrete our processes. We need care, connection, warmth, safety, et cetera. So again, just to bring this back to the practicality of why, again, why it's so important to learn how to follow your impulse as an adult.

It's in these first three paragraphs here that I've just read. It helps to develop an accurate sense of self through these bodily processes. All right, a little bit more on interoception. So, ”As we mature, our need for a nuanced interoceptive vocabulary becomes even more critical. We

need a reference system for understanding how we feel about different people, different circumstances, and different types of needs. It's easy to assume that the system of reference develops of its own accord, but in fact, it develops contextually requiring regular feedback from our social system in order to calibrate points of reference and rely on them with confidence." All right, so I turn the pages here.

Now I want to talk a little bit about neuroception. So neuroception, again, this is now coined by Porges. Interoception was not coined by Porges. Interoception is really a topic, a theme that's been around for quite a while. But neuroception was coined by Stephen Porges, who summarizes. So this is from the book, the term, this way. So this is how he defines it. "Neuroception describes how neural circuits," so the nervous system circuits, our nerves, "distinguish whether situations or people are safe, dangerous, or life-threatening." He also describes neuroception as "a dynamic and interactive process whereby we respond to cues about safety and threat while simultaneously transmitting similar cues in our social interactions." And a lot of this is nonverbal. It's just how our energy is, how our body posture is, how we attune, how we look, how we don't look at things. "Interoception and exteroception – " So I didn't mention exteroception.

Exteroception is what you know about orienting, being perceptive of the external world. So exteroception is a fancy word for what's happening in the external. So, "Interoception and exteroception both inform neuroception. If we have a healthy, well-developed safety system, our interoceptive and exteroceptive systems will work in an integrated fashion to help us differentiate information and determine when we are safe and when we are not. Likewise, our social systems will have helped us experience a sense of safety and security in our relationships, which reinforces our ability to perceive safety and experience a sense of belonging and security." I'll keep going a little bit more. Neuroception refers specifically to the neurophysiological processes involved in the perception of safety and threat, what Porges refers to as the neural platforms that support certain categories of behavior." Now I'm going to jump to page 33. "To experience healthy neuroception, we first must be able to differentiate between safety and threat."

"Neuroception is about the detection of both. But to properly make the distinction between the two, we need one number one, reliable access to a sense of safety. And two, care providers who help us regulate our responses and understand environmental cues contextually. And three, coherent feedback from our social groups about how we ought to categorize our experiences together. These three elements support the development of necessary and

healthy neuro platforms that neurophysiologically help us differentiate between safety and threat." A lot of big words there. So I will make a commentary on that in a moment. So what you hear there is this back and forth between safety and threat. Now in this text, there is an assumption that one who is reading this, the child, the human, the adult had that sense of safety, that healthy attachment, that attunement, their biological needs were met on demand when they were babies, when they were toddlers, which then, and we'll get into this in the next page on the training call handout, develops healthy co-regulation, healthy regulation of all these nervous system branches.

We have been talking about, as you read, or as you heard me read, it isn't just about us individually, it's how we also connect with the outside world and our social groups. Now, what's interesting of course is we're in a day and age where a lot of us aren't in safe social groups, or we don't have a social group yet because we're working on the past social groups that didn't serve us. So for some of you and myself included, in some ways, we're in this pickle, right? Bit of a uh oh because we know those old groups don't serve us anymore, or maybe our family system. That's good information, right? You don't want to go back in, as he said, into relationships that aren't safe. But now some of you, and I really want to speak to this, you're like in this weird limbo where you haven't found that new group.

And this is where you have to really trust and know that as we develop, as you develop your regulation and you put the beacon out into the world, I'm looking for my social groups, the people that will connect with me and are my people, I will find them. And that's where we really have to trust. And what I've seen, it does happen, but we have to go through almost this pruning process, this letting go. This is, you might call, a death process, not literal, but the dying off of the old so that the new can sprout up. And it is very difficult to find that accurate interoception when we have threat constantly around us or the history of threat still in ourselves, in our posture, in our tissue. And of course, this is why, working with the body, the somatic self is so important, because we want to get out of the patterns of collapse or tension or hypervigilance.

Because if we are still in those patterns, our message to the outside world isn't going to be accurate. And I was just writing a piece on healthy relationships and toxic relationships, and I came across a meme. It'll go out on the Monday email, something like, okay, I'm ready to go into that next toxic relationship and be hurt. It's like the system looks for familiar, even if the familiar is unsafe. And has anybody found, as you've been doing some of this work over the last few months, that you aren't sure who you are anymore, is this sense of, I feel weird. I don't

feel like myself. That's actually a really good sign that shows that you're breaking out of the patterns that you were conditioned in that kept you alive, of course. But now it's like, okay, it's more about just survival. It's about thriving and evolving and creativity and connection.

So yeah, as Anisia said, no clue who this person is. That's cool. You'll find out, right? So yeah, there's a few people saying, yep, this is me. So this is where a lot of times people will stop doing the work. They think something's wrong, but in reality you want to keep going because then you find, again, to bring in the term that Gabor Maté uses a lot, authenticity. Who is that authentic self? And this comes back to if we didn't get to be authentic when we were children, and our ways, then we're having to recreate that and rebuild that as adults. The good thing about being an adult is you can choose. You're not under the influence of being dependent on your parents. It's your choice to choose who to go to, what to do, et cetera. All right, page four. Page four.

So some of you had noted that I haven't mentioned the ventral vagal yet, so I haven't forgotten about it, because this is another part of the parasympathetic nervous system. So page four, top of the page. So this comes back to primary wiring, how we were wired when we were young, and just a reminder for everyone to stay still in your body, connected to that chair, connected to the need for you to move. If you need to drink water, if you need to stretch, if you need to orient, close your eyes, whatever you need to do to stay present. So the ventral vagal branch. So first line here at the top, the ventral vagal branch. This is the social engagement portion of the autonomic nervous system. So again, this is part of the parasympathetic nervous system. So you've got the dorsal, we just talked about that. That's the rest, digest, and the shutdown. But then there's this other branch, which is the ventral vagal, and that portion is not fully refined, that's the first word, nor mature when we are born.

So it's not quite working when we come out, when we're full term babies or not full term. So the first bullet, we have to learn how to use it. That's the word. We have to learn how to use it. The refinement and wiring, that's the word. Wiring must be built up via social engagement from another more mature human. It must be built up if the wiring was not optimal in early life. We need to build, that's the word, build the foundations and teach. That's the next word. Teach the body what self-regulation and co-regulation is. Now, I'm also going to give everyone here the benefit of the doubt. If you're sitting here hanging out, you can write, you can read, you can speak. Some of you can speak more than one language. You can cook, you can clean, you can drive a car. Maybe some of you went to university, got kids, you had good enough, you did.

Might not have been the best, right? But it's good enough. It was good enough to get you here because there are instances where babies don't get that, where they're literally not connected with in any way, and they don't last very long, or they're not well. They don't learn how to speak if they're not spoken to. So all of you who can speak, and I'm pretty sure that's all of you, you got some good stuff. You can speak, you can communicate, you have empathy, these sorts of things. You wouldn't be here if you didn't have that. So I want to just really put that into perspective. For those of you that might feel that, oh my goodness, this is impossible. You've gotten this far, and that's super important. So just know you got enough. And we're here to improve the elements that weren't done as well as they could have been. The healthy attachment, the secure attachment, the ability to understand your internal needs, that interoception, et cetera, et cetera. So next one down notes on co- and self-regulation.

So this primary wiring that happens when we're little is how we learn to self-regulate. And interestingly enough, we learned self-regulation via co-regulation. So if we think about infants, actually I'll read this piece and then I'll do a little backup on this. So the next example here. So for example, the baby. The baby, any baby, does not have not have self-regulation when born. If they're born full term, they do have full development of their dorsal vagal system. They can shut down, they can digest food, they can poop, they can pee. That's why if a baby is healthy, they can take in food, they can process the liquid. They urinate, they defecate. All is great. That's basically what they do. And they're also learning how to be a human, which is a big job. So the baby doesn't have self, but they don't have self-regulation. This is why we don't want to leave a baby unattended. They need connection. They need to be fed, they need to be cared for, they need to be soothed. So next one down, she learns, that's the word, learns, because it's a learning, she learns how to self regulate by co-regulating with the mom, dad, or caretaker.

So this is just one of the hallmarks to healthy attunement between infant and adult, having connection with a more mature and regulated nervous system. So the infant gets those primary wirings that start to form a self-regulating and more emotionally intelligent human being. So that is why babies need older people, adults. Number three, she learns how to self-regulate based on how she is taught in the co-regulation dance. That's the word I've used there. Dance, because it is a dance. It's a back and forth. She is borrowing her caretaker's ventral, vagal, parasympathetic nervous system. So I'll explain what that means in a second. She's borrowing her caretaker's ventral, vagal, parasympathetic nervous system. So the baby isn't taking that nervous system out of the mother literally. But the baby is noticing, how is mama or papa or grandma or nanny, what does she feel like? How do her eyes look at me?

How does the touch feel when I feel distress? Oh, I'm picked up with ease and connection, and oh, there's no alarm, there's no fear. And so then, baby goes, oh, I mean they don't think this, but they feel it energetically. This is that ventral vagal, that safety. And then that is what brings the system down in that infant. Maybe it's through feeding. Maybe they're hungry, maybe their temperature is off. Maybe there's a little bit of, we would call it distension in the gut, a bit of gas. That's why we're always kind of making sure babies are processing their nutrition and have not got all this gas in their belly, et cetera, et cetera. Maybe they need to play. Maybe the baby has energy. The baby's like I need to be talked to, and then the parent plays with them, right? Or maybe baby doesn't want that, they want to rest.

And so it is that dance where that little human is getting feedback from the outside world and with healthy connection, healthy attunement, that little one goes, oh, I can settle. Oh, I can relax. And with each little, we could say, stroke of that connection, her vagus nerve that isn't yet fully myelinated, that ventral vagal starts to grow and get bigger. This is what creates what we call the myelination around this ventral vagal branch. Now, if you remember from biology of stress, video number three, that ventral vagal branch goes to the heart. Remember that? It goes to the heart and it actually helps regulate the heart in a more calm, refined way. It's the pacemaker of the heart that it goes to. And so it does that. It goes to the face, the voice box. And this is how you start to learn how to hear, and see the mouth of the mother or the father, whoever it is, but also the baby starts to see sounds, the connection, all these things are happening.

There's so much occurring in that little person's life with that healthy attachment. Now, of course, if that is not there, then it's not having the right connections in the way we want. But as I said, all of you here, you got enough to be here and to learn speech and to be able to nod your head and smile and have empathy for someone who's suffering. So that shows that you got enough. But let's just say you had that connection. Let's say, yep, you got fed because obviously you did. You're here, you were cared for enough. But let's say when you were picked up, the hands were a little tense all the time in that tension, you felt the fear in your mother or your father or whomever, or let's just say when you wanted to play, you were left alone and you were left and you had to cry, or you had to cry yourself to sleep again.

This is taught in biology of stress, video number four, right? The baby that's left to cry themselves to sleep will eventually probably go into a shutdown response. And this is where we hear people say, oh, baby was so happy, never cried once. That's not a good sign. You want a baby to be able to speak through crying, to say, I need this, I need that. Now, of course it

comes with, there's a spectrum. We don't want the baby to be crying 24 / 7, right? The cries come, the needs are met, the crying comes down, that builds, that teaches the little one, another little check mark of, oh, I can come down. But if we're not connected to, if we don't come down, the system does then feel, I don't know what to do. And then this, of course, as we know, is where that early trauma, developmental trauma comes in, which we've talked about a lot, and you've heard it on the Q and A calls.

And that's where the system, generally speaking, the biology goes, I'm not safe. There's nobody there. Someone's there, but that someone isn't giving me what I need. I'm confused right now. The baby isn't thinking that, but their physiology, this is where that interoception to go back to interoception, neuroception, comes in. It's not accurate. And so the system starts to maybe not ask anymore for that food, for example, right? I'm hungry, but the last time I cried, nothing happened. So I'm going to start shutting down the interoceptive sense, and a great video, and I'm pretty sure we have this on the additional resources, is Jean Liedloff's work. Has anybody come across the Continuum Concept? Jean Liedloff, she's well passed. I believe she was, I'm not sure if she was American or British, but she kind of went into the jungles, into other cultures and tribes, and saw that babies who were not living in the West were always happy.

They didn't cry, cry all the time. They had a little bit, they were met, and then their system came down. They were also never colicky. They never had digestive problems. They had suppleness to their bodies, where, she would say, you would hold a North American or a Western baby, and they were rigid, colicky. They didn't know how to soothe themselves. They weren't curious with the world, a completely different kind of baby. Now, of course, it's not the biology, it's how we were nurtured. This comes back to the whole nature nurture piece. So her work is great. It goes into this ability of giving these infants what they need, trusting that their bodies are smart. But of course that has to come from the parent, the caregiver who also believes that their body is smart and that they can trust their body. Then that's how you gain that beautiful co-regulation, and speaking with people like yourself, your SBSM peers, I have now met enough young mothers who have had babies before they got into this work.

And then after, and some of you might be here, I can think of two to three now, where women are now having their second child with this knowledge on board, with SmartBody SmartMind in their system, with more regulation. And they have said it is night and day. They thought that there was something wrong with their babies, but what was happening was their own regulation was causing distress. Now, this is not always the case because obviously there can

be other things going on, but generally, generally speaking, not only is the birth, much more, I don't want to say, easier, it's not about it being easy, but it's more in connection to primal impulse sounds. Were able to come out, advocating for self during birth was totally different, has nothing to do with home or hospital birth. It's just what happens in that process, it was so different.

And then they see the difference in the child afterwards. So it's a cool thing to see in such a short period of time. It's only been maybe a handful of years already. This shift I'm seeing in you guys, those who are having little ones, and for those of you who work with kids, many of you might be grandparents, aunties, uncles, your teachers. This will shift how you work with those little ones, or how you connect with your family members who are little, and how you might be able to influence how others in your family see infants. So I just wanted to give that little shout out because it was really cool to see that change. There was actually a great, not an article, an interview I did with… her name is Erika. I'm just going to make a note and we'll make sure we put that somewhere.

If you look up Erika and my name, Erika with a K, she talks about her birth story with SBSM versus not. And it's a great story, because she trusted her body in a totally different way, and really saw the difference in the infants, and how calm they were after the birth. All right? Yeah. Someone says here, my grandma always told me I had a very anxious mother. No wonder I feel so anxious myself. I can sense it in her even now when she's stressed and I panic. Yeah, exactly. So what I'll offer to you and everyone here is how can you differentiate from mom? She is not you. She ain't you. She's her. You let her be anxious in her world and have grace and empathy for her and know that's her journey. But you've got to do your own thing, break out of those connections. And this is how we start to break the cycles of trauma.

And this also means having really strong boundaries with family members. So go to page five. There's nothing here that is to be talked about in depth, because I wanted to bring to light three pieces on my YouTube channel. Interestingly enough, we just released the first two. They were originally put out in 2018, which, gosh, is a while ago. One is the story of Teddy. This just came out this week. Has anybody watched that yet? And then the other is the story of Ryan, that came out two weeks ago. When you have time, if you feel like bringing in another story to understand attachment, trauma, early trauma, I've chosen these two stories because they show, drastically, these concepts in play, not in the nicest way. They are quite horrific stories, I'll be quite honest. But it shows what happens when we don't get good, secure attachment. And

also in the case of the story of Teddy, this is the story of Ted Kozinski, who was known as the Unabomber in the United States, a criminal who died I think a couple of years ago actually.

He had good, secure attachment. He had a loving family, quite so. Peter interviewed his mother, but he had a medical trauma, severe medical trauma when he was six months old, he was put in a hospital for, I think it was, forget the number, four or five weeks, and strapped to a table because of a skin rash. And so this is a great and terrible story of how babies cannot be left alone in such circumstances. It is a wonder he even survived, to be honest. But she said when he came out, so, he went into a skin rash and they just hospitalized him. When baby came home, mom said he was never the same. His body was limp. There was no more life in him. He wasn't a happy baby. He survived. But that then was the, one could say, the insult, that then created a bunch of stuff that occurred after that.

That wasn't very good. But I like giving you these stories because it shows real life examples of how the nervous system, early traumas and traumas that are not at the hands of the parents, even this was a medical intervention at the time they knew they needed to do. Of course, it would be done very differently now, I hope. But that story is great, and I have to piece together in that story three different sources, one from Peter's book, one from a series called Manhunt, that again I talk about in the video, and then just going through historical accounts and finding research on it. So worth looking at. And then the story of Ryan is again about not having proper attachment with one person. So this little kiddo had nannies, something up to 11 nannies, I can't remember the exact numbers, by the time, I think, the child was maybe 18 months old.

And it was because the mother just didn't know. The mother didn't like the fact that when she came home from doing her stuff, the baby didn't want to be with her. The baby wanted to stay with the nanny, which makes complete sense. The baby doesn't know in some ways the difference. And so whenever the baby didn't want to be with mom, she would fire the nanny. And so this little kid never got secure attachment, even though he had connection all day long, he started to disconnect from his attachment figures. They kept being taken away. So again, a great story, as someone said, that was talked about in Bruce Perry's book, Born for Love, and then the final resource there, How to Tame a Tantrum. That's in some ways a fun and a bit of a sad story about my experience in the city of Rome many years ago, wherein I witnessed a little kid who wasn't being treated very well by his parents.

And it was very sad to me. But rather than get pissed off at him or the parents, I should say, I decided to play with this child, because I couldn't handle seeing this kid being, not only in a

tantrum, but being hit by his family members over and over again during this tour. It was quite tragic, but it's again, a great example of how kids just need connection. They need to be played with, they need to get their aggression out. And it's just, I'll never forget his face. He's such a good little guy who just needed to be played with. The last thing he should have been doing is being on a tour all day of Palatine Hill and the Coliseum in Rome in the hot summer, right? Most of us wouldn't want to do that anyway, so why would you want to put a five-year-old through that?

So I end with those stories, because they're real life examples of all this nervous system theory into play, how we learn co-regulation, how we learn self-regulation. This need for us, you guys as adults, to learn how to self-regulate via connecting to your interoception, building internal resources, and how you use external resources to sense your internal space, right? How you take care of yourself by listening to your biological impulses. And then of course, the work we do, the touch, the movement, the theory, how it all kind of trickles together. So I hope you're all seeing these connections and how they work. And again, as I said at the very top of the call, keep going back to the basics.

If you're ever stuck in a situation where you feel a bit frozen, a bit paralyzed, you dunno where to move forward, come back to, can you feel your feet? Can you feel your ground under you? Can you let your eyes be felt? Can you see far? Can you see close? Can you orient? Can you move? Really make use of the resources in SBSM. Put in. Put in. It's like it's a cassette tape. Put in a lesson, push play, and just listen. Just have it even on in the background to remind yourself that you can stay connected to these places and pieces, right? And then how you can bring that out into the normal world, the regular world. So it's not just when you're in the comfort of your own home. We want to start bridging this and transferring this into the outside world, into integrating.

So thank you everyone for hanging out with me on this Tuesday. Thanks to everybody listening to the recording or watching it afterwards, and we'll see you next week for our next call. And thanks to the team, thanks, Ari, for being on the backend to make sure everything goes smooth. And thank you, Carrie. Hello Carrie, for being in the chat, helping folks as needed. We will see all of you later. And yeah, give yourselves the benefit of the doubt you've got. Good enough. You're here, and now we're just refining and making it even better. Yeah, so have that perspective, if you can, for a little bit, and see how that might shift, how you connect with the lessons and the learning. All right. Bye everyone. Ciao.