Ep. #373 - Pain Science Explained Pain... So... Now, What Does A Person DO? How Does A Teacher Teach?

Full Episode Transcript

With your host:

Susi Hately

From Pain to Possibility with Susi Hately

Introduction (00:00.00)

You are listening to From Pain To Possibility with Susi Hately. You'll hear Susi's best ideas on how to reduce or even eradicate your pain, and learn how to listen to your body when it whispers so you don't have to hear it scream. And now here's your host, Susi Hately.

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Welcome, and welcome back. I'm so glad that you're here because today is a bit of a throwback. I'm looking back at before pain science, then pain science, and after pain science, and where are we now in regards to how we are applying what we know about pain science in a way that really, really helps people recover and reduce pain effectively and get on with their lives.

And this episode has been inspired by me actually finding an interview that I did with Dr. Tasha Stanton back in 2017. I ran an online conference all about the research back at that time around pain and had the opportunity to interview her, as well as David Butler and Lorimer Moseley, all of the NOI Institute, plus other health professionals, and to really dig into, like, where things were at then.

And it's so interesting because as I reviewed a lot of the gaps that I saw back then, still exist today. I think I can now speak to those gaps more clearly and more cleanly and more effectively, and really where the work that I do fills in those gaps in terms of helping teachers teach and also helping the people with a chronicity of pain symptoms really help them to reduce and eliminate pain.

So I've broken up this episode into sections: before pain science, then pain science happened, where the conversation has stopped, and really understanding pain, how that didn't restore movement. So then knowing all that, what does a person do? And how relief really isn't the endpoint; it really is the beginning.

So I look forward to sharing this with you because it was kind of fun to go back and review and consider and just look at how far we've come and where the opportunity really lies. So we think about before pain science because I was, I'd already started my career before pain science ever became a thing, before pain science entered mainstream rehab, yoga, physiotherapy, fitness, and medicine.

The dominant conversation around pain was largely structural. If something hurt, the assumption was that something must be damaged. And the conversation revolved around degeneration, torn tissue, weak muscles, instability, misalignment, wear and tear, compressed discs, tight muscles, poor posture. People were told that their pelvis was out, spine is degenerating, their weak glutes, core wasn't functioning, knee is bone on bone, and yes, you will have to manage this forever.

And once people heard that kind of information, they became afraid. Afraid to bend, afraid to rotate, afraid to lift, afraid to walk hills, afraid to load, afraid to move. And in the yoga world specifically, people were often trying to stretch themselves out of pain, more opening, more releasing, more flexibility, more mobility.

Except a lot of those people were already collapsing into their joints and were already moving with poor load transfer, already gripping and bracing and holding on and still hurting. At the same time, there are many clinicians and movement teachers helping people improve pain, even if they didn't fully understand why.

People felt better after massage and yoga movement, touch, walking, breathing, manual therapy, exercise. But the explanation was still very much mechanical: fix the tissue, fix the alignment, fix the structure. And yet there were inconsistencies everywhere. Some people had scans that appeared to have a lot of horrible things in them, and they had no pain.

Others had significant pain with almost nothing notable on imaging. Some people improved rapidly. Others did not improve at all despite perfect exercises. And some people flared up emotionally, and their pain worsened. And others reduced pain simply by changing how they moved or understood their symptoms.

So really the bottom line is that the old model cannot fully explain those realities because the old model explained tissues. It explained damaged structures, but it couldn't fully explain why humans still hurt, protected, guarded, compensated, or lost trust in movement the way they did. Pain became reduced to damaged parts, and because of that, people became afraid of movement.

There was a focus on structures instead of patterns. Symptoms became interpreted as evidence of breakdown. The quality of movement got overlooked, and people lost trust in their bodies. Treatment became very, very fix-it oriented. Now back then, I was at an advantage because after I graduated in 1995 from university and my kinesiology degree, I worked at a pain clinic.

We called them back then a chronic pain clinic. And so I was seeing the people who had a lot of pain for a long time, and this was kind of the last stop that they had. And something that I came across early on was when I could help someone move in a range that didn't increase their pain, their pain levels dropped.

Now I just came across this happenstance. I'd already started doing some yoga. I already started deliberate breath practice. I didn't really know what the heck I was doing. I could explain it from kinesiological principles, but that was it. I was not entrenched in yoga or yoga theory enough to really know what was going on from that perspective.

But I applied it, and people were getting better quickly. So I quickly drank the Kool-Aid, immersed myself in it, and just kinda kept following what I was seeing. Then pain science happened. Pain science changed the conversation. That was very important inside the medical world. It really mattered. It was significant because researchers began helping us understand that pain was not simply a direct readout of tissue damage.

We learned that, yes, pain is real. The nervous system adapts. Pain and tissue damage are not always proportional. The brain interprets danger signals and context, and fear changes movement. Stress changes pain. Beliefs influence symptoms. Past experiences matter. Sensitization is real, and scans do not always predict pain.

One of the biggest shifts was understanding that the nervous system can become protective. Protective not because someone is weak, and protective not because they are imagining things, but protective because human systems adapt. And that helped people feel less broken. It helped explain why someone could hurt long after tissues healed.

It helped explain why someone could flare up without a new injury. It helped explain why someone could feel pain during stress. It helped explain why fear could amplify symptoms. It helped explain why movement avoidance could worsen things. And importantly, it also helped many people begin to move again, not because pain disappeared, but because they stopped interpreting every sensation as damage, which was important, really, really important. So for those people, pain science helped to reduce fear, and reduced fear often changed movement.

People started to walk again, lift again, breathe better, try more movement again, and that really mattered. So the beauty of pain science is that it changed the conversation around pain, and it helped explain that pain is not simply a direct reflection of tissue damage, but rather it really helped people begin to understand how the nervous system adapts, how protection can persist after healing.

Fear and context can influence symptoms. Scans, and this one's important, do not always predict pain. Movement is not always dangerous. And that is what contributed to people reducing fear and making movement feel possible again. However, while pain science explained pain more fully, it still did not answer an important question.

What does a person actually do differently, and how does a teacher help them move differently once they understand pain intellectually? So then where did the conversation stop? As I listen back to that old interview and the conversations that I had with researchers and other super smart people in that era, I can hear where many of the conversations stopped.

People were told, "Your nervous system is sensitized. You are safe, and yes, your pain is real." And while validating and important, a lot of people were still left wondering, "Okay, what now do I do?" And frankly, a lot of health professionals and yoga teachers and yoga therapists were also wondering what to do because understanding pain does not automatically restore movement.

Someone could intellectually understand pain science and still limp, guard, brace, collapse into one hip. They can still grip through their neck, stop breathing when effort increased, avoid loading on one leg, lose pelvic movement, hold ribs rigid, over-recruit their shoulders. The explanation changed, yes, but the movement pattern often remained the same.

And this is where I think a major gap was revealed because a lot of people became very good at talking about the nervous system, but not necessarily good at helping someone move differently. In fact, what I found happening quite a bit was actually very similar to when I had first

graduated. Because when people back in the day saw a scan that had nothing notable on it, yet they had pain, they were not believed, and health professionals would tell them, because that was the mode of the day, that it's all in your head.

Because what pain science showed is that tissue damage and pain didn't go hand in hand, right? You can have pain and have no tissue damage. You can have pain and have tissue damage. You can have no pain and have tissue damage, and you can have no pain and have no tissue damage. So tissue damage and pain aren't, like, one and the same.

And I would hear some therapists, whether they were physical therapists or other rehabilitative professionals, massage, yoga, Pilates, like wherever, say, "Well, how someone's interpreting their experience is on them. That's not on me. I'm providing the work they need to do to support themselves, but if they don't believe they can get out of this, if they have their own belief about their pain, I can't do anything about that."

And in a sense, I remember thinking, "Wow, it's kind of the same same." Whereas when I had first graduated and there was nothing notable on the scan, often the message was, "It's all in your head." This was now a leveled-up version of "it's all in your head." It was still like it's still on the client. Or for the therapist, it's like, "I don't even know what to do with this person when it feels so complex what's going on."

What I would see hear over and over again from about 2017 to 2021, 2022 is, "Pain is complex." And there was sort of this shrugging of the shoulders. Pain is complex. I remember having a discussion with a yoga trainer who actually said about a client of hers, "This is as good as it's gonna get for her. That's just the way it is." And I had to kind of keep my jaw up with my hand in a way, thinking, "How on earth?" It was really stunning to me because, well, of course pain is complex. When we look at the yoga model, we've got the kosha model. We've got five layers of being. The kosha model simply explains our way of looking at a human being, multiple layers.

There's the... To put it really, really rough in a translation, there's our physical body layer, there's our breath layer, there's a mental layer, an emotional layer, a spiritual layer. So of course human beings are complex. Of course pain is going to be complex. But to end the conversation there really does a disservice to not only our client but to us as the professional, us as a human interacting with another human.

The bottom line is that understanding pain did not automatically help to reduce pain, to restore movement. So knowing all of this, and by the time pain science became a thing and I interviewed back in 2017 Tasha and Lorimer and David, I'd already been helping people out of pain since officially as a yoga teacher since 1999, but really from 1995.

I mean, that's a lot of years. And now we had more words and understanding about what was happening, and I started to see more of a clearer bridge. Because someone can absolutely understand that pain is complex and still move in ways that continually reinforce protection. And some people might just shrug their shoulders and say, "Well, yeah," because they're moving in that way because pain is complex.

But what I saw, which is a part of the journey of understanding helping people heal and becoming more skilled as practitioners across the industry, is it seemed like there was a pendulum swing way away from biomechanics. It's as if biomechanics no longer mattered. It's as if coordination no longer mattered. It's as if strength no longer mattered. It was as if load no longer mattered. But the reality is, is that human movement still did matter. Load transfer mattered and timing mattered. Coordination actually did matter, so did variability, and so did relationships between body parts. All of that still mattered because humans, as complex as they are because they're humans, and pain, as complex as pain is because it's pain that happens to be within a human, the reality is that the humans still need to move.

And maybe because my background is as someone with a kinesiology degree who has applied that to yoga, I was able to not get distracted and really focus on what made things simple. Because what I started with back in that chronic pain center was helping people simply move with less or no pain. When it could help someone simply move with less or no pain, they then experienced less or no pain.

Their movement was a lot smaller, yes, but they now could see that they could actually experience less or no pain. And when they could experience less or no pain, their thought patterns changed. And when their thought patterns changed, their beliefs changed. And when their beliefs changed, their future possibility changed too.

And from that place, we could then start to improve the way that they moved, how they moved, the range that they moved, added load and got stronger. And it all started from this basis of simply simplifying simple movement. Yep, I use simple on purpose three times because what is actually really quite complex, because we are human beings, we are complex by nature, the actual process can become quite simple when we aren't distracted and we simply can hone in on what's actually important here.

Said another way, pain science helped explain why pain could persist, but in the process it also unintentionally created a gap. Some movement spaces became so focused on nervous system safety, fear, and sensitization that mechanics, coordination, movement quality, and load transfer became under-emphasized as if mechanics no longer mattered, as if strength no longer mattered, as if timing no longer mattered.

So this leads to the idea of what does a person do and how does a teacher teach? I begin the conversation from the body. The reason I begin the conversation from the body is, number one, it's the way I was trained. It was the way I was trained with kinesiology, biomechanics, motor control, and coordination, and I just happen to love the objectivity of body movement.

Thoughts, that's a little bit more difficult. They sit inside of our mind or inside of our brain. No one else can see them. They're a very subjective experience. But objectively, I can see: is an arm bone moving in a socket? Yes or no? Is a leg bone moving in a socket? Yes or no? Does the person rotate, hold their breath, clench their eyes as they move? Yes or no?

It's very, very objective, and the beauty of Zoom these days is someone can actually see themselves doing it as well on the screen, and there can be an agreement about how the movement is happening. It's very objective. We see, both of us can see what's actually happening, and then we can tie it together with what we don't see but a client can feel. And when a person can tap into what they can feel and connect it to what they objectively can do and see, that's when the connections really happen.

And this is where I think the next stage of helping people really heal is going to start to take off. Here's what I think it is and why I think it's going to take off. Most of the clients who come to see me have one key component that is similar amongst them all.

Yes, they have all had persistent pain for a number of years. Yes, they have all relied on expert advice that hasn't fully worked. In some regards it has, in other regards it hasn't. But the most important piece, the key piece that's similar amongst the people I work with, is they all acknowledge at some point that they lost touch with what they intuitively know to be true.

They lost touch with their gut feeling. They lost touch with their instinct. They lost touch with their inner intelligence. And it's so interesting because I've seen this even with people who've been through surgical procedures or cancer recovery, that surgery and cancer treatment can really hammer away that inner kinesthetic sense, that deep inner wisdom, that deep inner knowing, that, let's call it another thing, of an internal locus of control, or said one more way, one's own inner authority.

Pain can do the same thing. You can really begin to doubt your own self, and more so when you've sought assistance from professionals, and some of it has worked and some of it hasn't worked. And maybe you've even had professionals say to you, "Well, I guess you're never gonna get out of pain. This is... You're just gonna have to live with it. You're gonna have to find the safety of it for yourself. Your nervous system is overly sensitized, so go figure that out."

And that might sound really horrible of me to say, but this is what clients have said to me. So now they're walking around thinking, "Man, am I ever gonna get out of this?" And yet deep, deep inside of them, gnawing at them is, "Yes, I can."

And that's why they show up in my space. And I think more of that is happening. It's just not people coming to my space who think that way and feel that way. They're in many different movement spaces where the conversation is, again, moving beyond biomechanics, coordination, strength, load. What's becoming important as well is that deep inner knowing, that internal locus of control.

And when we combine that, or rather connect with that and combine it with movement, because learning about your movement helps elicit and reveal your internal locus of control, your inner authority, your inner knowing, when you combine those two, that is where healing really happens. One of the biggest realizations for me over the years is being able to explain with, to, together with my clients that relief is really not the endpoint.

Yes, relief matters. Relief creates possibility, creates hope, creates a learning window. But relief alone doesn't restore movement. We can get relief from massage, stretching, an injection, acupuncture, yoga, manual therapy, a release technique, and pain returns. It's not because relief was fake, although many people will sometimes think it is, but rather it's because the system doesn't have another way to move.

A person hasn't yet really trusted their own inner wisdom.

So the patterns remain even though the relief happened. Shoulders can still lead, ribs can still grip, pelvis does not transfer load effectively, feet can still grip, the neck can still overwork, breath can still disappear when effort rises, and the body can still protect.

And as I've mentioned a moment ago around internal locus of control, when we can combine utilizing movement as a way to reveal, and not to fix, but to reveal patterns and connect that to sensation that a person can feel, and bringing that intelligence into the mix, that's how we use relief as an opportunity for retraining.

That's how we can help someone sense what's changed. That's how we can help them recognize the difference between force and support. That's when we can help them notice when effort drops. That's when we can help them feel when movement becomes easier and when it becomes harder. This is where the opportunity lies for us as teachers and for our clientele.

So whether you're listening to this and you are someone who has a lot of pain, or whether you're a teacher wanting to improve the way that you teach, or maybe you're a teacher who's wanting to improve the way they teach and you also have pain, the real question that is available here is: how do we actually teach this?

Not through fear, not through forcing, and not through making someone override the inner wisdom of their body. But through helping someone sense, notice, compare, feel, refine, reduce effort, improve their load transfer, restore variability, and regain trust in movement. Because teaching movement is not simply delivering exercises.

It's helping someone perceive themselves differently while they move. Helping someone recognize when movement becomes quieter, when breathing becomes easier, to notice when parts of their body that were compensating aren't compensating any longer. Recognizing the yellow lights, the whispers before the body screams, before that red light pain really comes on.

And I think this is where movement becomes transformative, not because it fixes symptoms or people, but because people begin to experience themselves differently. It's that inner authority that rises, more connected, more capable, more adaptable, less afraid, less rigid, more trusting. It's what I mean when I say that pain science explained pain, but movement and breath and stillness, that's where people rediscover possibility.

Teaching movement, breath, and stillness together, interweaving the modern version of pain science, is not about forcing alignment or overriding the body. It's in fact the opposite. It's bringing the world of sensing, noticing, refinement, reducing unnecessary effort right into the

mix. We can allow pain science to fuel this, to support this, and specifically engaging people with the movements of their body and the sensory experience that those movements help reveal.

That's where healing really can happen.

Now, if this is interesting to you and you want to explore these ideas more in depth, I've got a new program that's coming up. It's called Building the Foundations as a Movement Detective, where I'm integrating very clearly the relationship between pain science and helping uncover and build upon the patterns that are revealed when we begin to move better and sense more specifically, and how that can tap into a client's inner wisdom, which really is the fuel, the spark that helps the healing process.

If this is interesting to you, we are about to announce the program soon. So you can go to **functionalsynergy.com/yes**, Y-E-S, and sign up to be notified of when we drop the program. It's coming really, really, really soon. And I'd love to let you know when it does. Take care and we'll see you next time.