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The 7 SURPRISING Ways To Heal Trauma Without Medication | Dr. Bessel Van Der Kolk

Intro

Rangan Chatterjee

00:00:00 — I wanted to start with a quote from your iconic book, The Body Keeps the Score. Trauma robs you of the feeling that you are in charge of yourself.

Bessel Van Der Kolk

Oh, that's a true statement.

Rangan Chatterjee

00:00:14 — Well, what did you mean by that?

Bessel Van Der Kolk

When you get traumatized, it's not the external event, but your reaction to that external event is that you cannot cope with it, and then you're vulnerable to react to other things as if they're catastrophes. So you may suddenly find yourself very scared or very angry or very aroused or very panicky, or you can shut down. And so you really have no control over those intense emotional reactions that happen after trauma.

Life is out of control

Rangan Chatterjee

00:00:53 — Yeah. So, in many ways, people who are traumatised feel that their lives are out of control that life is, I guess, happening to them, rather than them being in control of their lives.

Bessel Van Der Kolk

00:01:09 — Yeah, they keep reacting to stuff. And things are disorganised. And then oftentimes, they start off blaming the people around them for having caused them to be so angry or panic or something or another. But after a while, people start realizing, oh, it's really my reactions that make life so difficult. And so how do I control these reactions becomes a major issue. And oftentimes, people learn to sort of shut themselves down and learn to not react. But with that they become very distant to themselves and the people around them.

How do I react to adverse issues

Rangan Chatterjee

00:01:51 — I think what you said there was really quite poignant for me that we often think it's the people around us that are causing us to feel a certain way without that deep realisation that actually we're generating those emotions. We may not know why we're generating them, but ultimately it's coming from within us, isn't it?

Bessel Van Der Kolk

00:02:11 — Yeah, not the whole story. Negotiating your ways through the world is complex. People will say things that may not be pleasant, or they may not respect you as much as you'd like it to be. But the core issue is how do I react to adverse issues? And I cannot change everybody else. I have to actually learn to manage my own arousal and my own reactivity.

Trauma vs stress

Rangan Chatterjee

00:02:44 — Yeah. What's the difference between trauma and stress?

Bessel Van Der Kolk

00:02:51 — The big difference is when stress is over, it's over. And so when you sit for an exam, you're working hard, you may not be able to sleep, but once you take the exam, you can go for a walk, you can go do whatever you want to do, and the stress disappears. And stress is not bad for people, because we really are programmed to deal with very adverse circumstances.

00:03:20 — People can deal with a great deal of stress, but the critical thing is when the stress is over and you've done whatever you needed to do to deal with it, then your body resets itself, you become calm and you stop being hyper-focused or whatever. When you get traumatized, those reactions don't stop.

How we view the world

Rangan Chatterjee

00:03:41 — So trauma is almost like a severe stress response that never ends and that starts to change our nervous system and how we view the world, how we react to the world. Is that one way of putting it?

Bessel Van Der Kolk

00:03:56 — Yeah, it's not as cognitive as view the world, is really how we react to the world. Our reactivity changes, and we may become too intensely aroused by minor issues. So actually, so trauma, talking from a neuroscience point of view, we have some networks in the brain that help us to select what's important, what's unimportant, it's called the salience network.

00:04:29 — And after you get traumatized, that salience network makes you react to minor issues as if it's a catastrophe.

How common is trauma

Rangan Chatterjee

Yeah. How common is trauma, would you say?

Bessel Van Der Kolk

Oh, extremely common. And it's of course all kind of gradations, but things like being abused by your own parents, being brutalized in your personal relationships by somebody is extremely common.

00:04:58 — And it is really ironic that when we first defied PTSD, we said, this is an extraordinary event outside the usual range of human experience. And we were completely wrong about it. Because when we started to look at it, we found out that at least one out of four women, one out of five or six men, had sexual abuse experiences before the onset of adulthood.

00:05:27 — For example, that a very large number of women get raped, very large numbers of people are involved in domestic violence situations. So it's in fact, it turned out to be much more common than we ever thought it would be.

Shame and secrecy

Rangan Chatterjee

00:05:46 — I mean, those statistics are really alarming when you put it like that. I imagine, Dr. Van der Kolk, that some people who are listening or watching right now will think, "Wow, is that many people?" They will think, "Well, I know loads of women and loads of guys, and I've never heard about this happening to them," which potentially speaks to secrecy, shame, the fact that many people have suffered this and are continuing to suffer because of the traumatic imprints. But they're not talking about it, right?

Bessel Van Der Kolk

00:06:20 — And that is on the mark, that when you, after you get—if you're—after you get assaulted or after you get raped, you don't go around telling people about it. There's always this issue of, "I must be to blame for what happens." Or if you're in the domestic

violence situation, you don't tell people, "Oh, my boyfriend or my girlfriend just beat me up," because that reflects badly on you.

00:06:46 — And so, shame and secrecy is very much part of trauma situations. It's very striking when there's a public trauma. My example in the culture I live in is 9–11, had the attack on the World Trade Center. When there's an overt trauma, people tend to be very generous in terms of coming to people's help, but these private traumas of abuse, a nd people try to go on with their lives. But they keep reacting as if it's still going on. Yeah.

Factors of trauma

Rangan Chatterjee

00:07:21 — Now, when I think about trauma, and traumatic events, I think about the fact that different people being exposed to the same trauma will react in different ways. Some people will end up becoming heavily traumatized, whereas some people won't. So what are the factors then that determine if someone is going to have that chronic imprint of trauma, or whether they're going to be able to deal with it, you know, deal with that stress response and return back to baseline? Do we know what those factors are?

Bessel Van Der Kolk

Well, there certainly is an issue of temperaments.

00:07:59 — Anybody who has more than one child knows that we all come into the world with very different reactivity and different responses. So that is one factor. But the other major factor is the social environment and who is there for you when something bad happens. By and large, if you go through a terrible experience and you have a partner, a spouse, a parent, a boss who says, “Oh my God, how can I help you? I'll be there for you.”

Hardwired To Be Healthy

Bessel Van Der Kolk

00:08:32 — When your social environment helps you to protect yourself and to feel safe again, that makes a huge difference. So the principle, for example, after natural disasters, after accidents, war situation, the first thing you do is you reconnect people with the people they love and care for because that is really what for human beings is the main source of comfort.

00:09:00 — And so as long as you have people around you who acknowledge the reality of what you went through and who are with you in a very deep way, you probably will be okay.

Rangan Chatterjee

00:09:13 — Yeah.

Bessel Van Der Kolk

00:09:13 — And that of course is what happens in like wartime situations when people are at war, like what's happening in Ukraine right now, is that people feel very close to each other. And that's sort of a natural biological thing almost that when we are under extreme stress, we really become very dependent on each other and we form very close bonds. And that's how people survive.

00:09:39 — But if the people who are your most intimate people are the source of the trauma, you lose that sense of connection and protection. And then oftentimes that is when people go over the edge.

Rangan Chatterjee

00:09:52 — Yeah, it's interesting. As I was preparing for this conversation, and I was reading in your work, the importance of human connection, making us, I guess, generally more resilient, but in many ways, insulating us from the likelihood that a traumatic event is going to leave a chronic imprint inside us.

Bessel Van Der Kolk

00:10:14 — Insolent is a bit of an extreme word here. Okay. It helps, it makes a significant contribution.

Rangan Chatterjee

00:10:23 — Yeah.

Bessel Van Der Kolk

00:10:23 — But insolent is too total a word. But overall, when your kid, for example, and you need to go through an operation or terrible things happen to you, and your parents are there for you and acknowledge it, then that kid is likely to be okay. Yeah.

Raising awareness of trauma

Rangan Chatterjee

00:10:41 — Yeah, really, really interesting. I think one of my aims with having this conversation with you is to try and raise awareness of trauma, certainly to my audience. And as you've already touched on, it's much more common than we might think.
I certainly feel that the word is now much more commonly known about spoken about potentially in settings that may not regard as trauma, like we can maybe talk about that.

00:11:15 — But I do think this affects everyone on some level, whether individually or judging from your statistics that you shared, there's absolutely going to be someone in our life who we interact with, who has been traumatized. So I think it's imperative that we all have a deeper and more compassionate understanding of what it is, and therefore what we can do to help people.

Bessel Van Der Kolk

00:11:41 — Absolutely. And it's true that people are beginning to, the concept gets inflated. People pin too much on trauma. Also, in some ways, at the same time, trauma is a very real issue. Let me give you an example. I live in a county in the mountains of Western Massachusetts, and I gave a big public talk. And after the school principals of this area invited me to meet with them.

00:12:10 — And they say, "Can you set up a clinic for traumatized kids?" And I asked them, "How many of the kids in our country see domestic violence, witness people overdosing on drugs, get beaten up at home?" And the school principals said, "About half of our kids." And my response to them was, "Then you should not have a clinic for traumatized kids. You should have a school system that helps trauma-test kids, which is at least half of your population, to really learn to regulate their bodies. You need to have a trauma-informed school and not treat it as an individual problem because it's largely social problems."

00:12:55 — And so once you understand trauma, you change the workplace, you change your schools, you change your hospitals, and you really start paying more attention to the issue of individual safety and agency to help people to function.

Trauma in relationships

Rangan Chatterjee

00:13:10 — Yeah, with the term trauma, I think most of the public would understand intuitively if someone's been to war, let's say, we would say that's a traumatic experience. But what about something that I think pretty much anyone who's ever been in a relationship will experience something like this at some point when their partner says something to them that may well be on the surface quite trivial but for some reason the other partner disproportionately reacts. Maybe they're being reminded of when a parent criticized them when they were five years old and when their partner says something it isn't about what the partner said it's about the feeling that evokes very very similar to what you just mentioned that happened when you were a child, can we say that is trauma as well?

Bessel Van Der Kolk

00:14:02 — Well, no, I would say it's part of the experience, but I'm glad you brought up this example, because about a third of all couples engage in violent interactions.

So a lot of people carry a lot of trauma and in relationships, it comes out. And once you become intimate with somebody else, you live with that triggered behavior.

00:14:29 — And some things may be extremely upsetting for your partner, who may become very angry or shut down in response to things that you have no idea what was so awful about. And at that point, once you become trauma-sensitive, you can go like, "Oh, my partner isn't just being nasty, mean, and horrible." Or, "My partner gets upset by something that has very little to do with me."

00:14:56 — And then you can really sort of take a step back and say, "Honey, let's go for a walk before we address this," or "Let's play some tennis together," or "Let's sit in this for a moment," or "Talk to somebody else about what's going on here." So you get the heat of the situation. You decrease the heat of what's going on. But it's all the time, of course.

Trauma in personal relationships

Rangan Chatterjee

00:15:21 — Yeah. In fact, in my experience, at least, I see this playing out in people's close personal relationships all the time. It's, of course, it could be about what's happened in their relationship. But in my experience, it's very rarely about what happened in that moment. It's what that is making that other person feel. Which is why I think your work is so important, both for people who have experienced trauma, but also for people who want to help their loved ones who have been traumatized.

Bessel Van Der Kolk

00:15:51 — Yeah, yeah. And indeed, it comes out in intimate relationships. Most people are able to organize themselves pretty well under neutral conditions. For example, I have no idea that whether you become violent in your personal relationships or not, and you don't know that about me because we don't have the sort of relationship where we would get triggered about these very core issues.

00:16:19 — It's not until you really negotiate very complex issues about that happens in close relationships that these issues come out. So it gets contained within relationships. And I keep urging my colleagues who do outcome studies to always not only ask people themselves, but how do you react? But ask their spouses or their loved ones because they oftentimes can say more about people's irrational reactions.

Rangan Chatterjee

00:16:51 — Yeah.

Bessel Van Der Kolk

00:16:52 — Yeah.

Trauma in medicine

Rangan Chatterjee

00:16:53 — So if we think about trauma, we're saying it's very common. It's more common than many of us realize. As a medical doctor, I'm incredibly fascinated, frustrated that trauma is not really spoken about that much to medical students. Because I think about, particularly in general practice, you know, the sort of chronic conditions that often come in to primary care doctors, you know, anxiety, depression, addictions, migraines, fibromyalgia, all, you know, a whole host of issues, autoimmune problems. Actually, that the scientific research seems to suggest that trauma could well play a role in a significant number of these conditions.

Bessel Van Der Kolk

00:17:44 — Absolutely. And indeed, it is a temperamental issue that most people going into medicine want to have clear answers and clear paradigms. And we go to medical school, we learn about all these diseases and their diseases and we don't, to start talking about social context, would make it even more complicated. So you don't learn about it.

00:18:12 — And actually, right now, I was meeting with some old friends from my medical school days, is that we oftentimes did terrible things to patients and did not really understand how terrified they were of, let's say, white doctors, and how they would be neglected, neglecting their physical care, because they were too terrified about doctors to actually bring it up with them.

00:18:38 — And so, yeah, I'm very glad that some people in some medical schools and medical settings are beginning to pay attention to it, because the title of my book, *The Body Keeps the Score*, is not just a cute title, and actually it affects your immune system, it affects your stress responses, and people who have long trauma histories oftentimes have multiple medical problems which have to do with their body. They get stuck in fear, fight, and flight.

00:19:11 — And so, fibromyalgia is a very good example. Fibromyalgia is pretty much related to trauma, but it's so diffused that, like, I am friends with a very old man who used to run the National Institute for Rheumatology in America, and I asked him, "So, do you guys study fibromyalgia?" He says, "No, that's a disease of crazy people."

00:19:34 — And here's the guy who's the top rheumatologist in America, who just dismisses this very complex and very debilitating illness because the people who have it are just too complex to deal with and difficult and resistant. And so get nice clean illnesses.

Fibromyalgia

Rangan Chatterjee

00:19:54 — Yeah. Hey, listen, I wanna just pause on this point because I think it's really important. First of all, I do think medicine for all its benefits, for all the conditions that we do manage to help with, there's many conditions that we don't do a very good job with. And I think we can be quite condescending as a profession sometimes to certain sufferers of certain conditions like fibromyalgia because they don't fit in a neat box that we can do.

00:20:21 — Oh, this is the problem. This is the pill, it's going to get better. And so I think doctors often feel quite frustrated and powerless as well. I don't think they're necessarily wanting to be derogatory. I think they thought they were going learn what they needed to treat these patients. And then they're faced with people who keep coming back. And they don't know what to do. So I think that's one point I wanted to raise.

00:20:45 — You also mentioned something that I think we should just explore a little bit. You said fibromyalgia is a condition that that is, I don't know if you said often or always related to trauma. Now, I think we let's just clarify what we mean that because there will be people listening with fibromyalgia, this may be the very first time they've heard it. So can we just broaden that out a little bit so that they can understand what you mean by that?

Bessel Van Der Kolk

00:21:12 — Yeah, when you study fibromyalgia and you do a trauma history on people, you usually find a severe trauma history, usually within the attachment system of them not feeling safe. And what happens, I think is very much what happens with all of us to some degree, when we come to be scared, we become uptight and we start physically becoming defensive and hold on to ourselves.

00:21:40 — And that uptightness and trying to control things may then eventually get expressed as pharmacomyalgia, but you become a very anxious and chronically upset person. And the hard thing for medicine is, there is no clear answer. It's not like, "Oh, let me give you a pill and you feel better."

00:22:02 — You really need to go through a whole process that might very well involve body-oriented therapy, maybe massages, maybe really working with bodily reactions, which, of course, in medicine we never do. That really needs much more intervention than we are capable of, or that our systems allow us to intervene with. I know quite a few people who have resources in America with fibromyalgia, who find the right people to work with, who know about bodily reactions, but they're very hard to find.

Multipronged approach

Rangan Chatterjee

00:22:36 — Yeah. I would agree with that. I've seen many patients with conditions like fibromyalgia and I found what can be effective is when you take this multi-pronged approach. You do lots of different things. It's not just one thing. Different patients will

need different things. Different things are going to appeal to them, But it's in my experience, at least, Dr. Van der Kolk, and I appreciate you've got a vast amount of experience in this area, I have found that you just have to experiment and you need to try different things.

00:23:04 — But I also would say, you know, I would share with you that if I think back to a lot of my patients who I've seen in the past with fibromyalgia, when you explore deep enough, yes, it's not unusual to find some history of trauma there as well. So I would definitely agree with that.

Bessel Van Der Kolk

00:23:22 — See, and then you say the right thing here, you need to be patient at multiple times, but probably NHS and our insurance system doesn't give us the time to really explore these things because I think all physicians really are on a grid of pressure to alleviate, get rid of their patients and move on. And so these patients are time consuming and require a team approach and our assistants may not be prepared for that.

00:23:53 — And then the next thing happens, we become frustrated and then we start being mean and nasty to the people who suffer for it, only aggravating their condition. And so I think the place to start for us as caregivers is if we get particularly mad at a particular person or feel frustrated by a particular person to really mark that and say, oh, this person is really driving me mad.

00:24:21 — Let's see what's going on with that patient. That patient makes me feel so helpless. So the natural thing then is to become somewhat abusive with people like that. Because they make us feel bad and they take our time and they don't follow the rules.

00:24:41 — And so when you have people like that, it's really important for us to have our capacity to step back with our colleagues and to really reassess what's going on here. So I think our own reactions are a very important bellwether of whether we're dealing with a traumatized person. And I think as physicians, we have an amazing capacity to help recreate trauma for our patients. Wow. And I hear that all the time from people who go to medical systems.

00:25:11 — I know people who have breast cancer and heart disease, and they tell me about the exquisitely good care they got in our systems and how great the nurses were and how great the doctors were. And then you deal with people with trauma histories who have sort of these unknown issues. And they always tell me how terrible they get treated by the system. And I go, "Yep, that's what happens."

Retraumatizing patients

Rangan Chatterjee

00:25:36 — Yeah, that's very, very profound, because what we're saying is that we, the medical system, healthcare professionals, as you just put it, are re-traumatizing patients who are already traumatized. We may not realize we're doing it, but because of the lack of understanding, the lack of knowledge, the lack of time, those patients who are already struggling, these are a lot of the time the ones who feel lost. They don't know where to go, they're seeking out books or new information just to see, "What can I do? I don't want to stay like this forever." And it's not just, you know, the conditions you mentioned; even a lot of people with autoimmune illnesses, you know, I've found that they also respond very well to this kind of multi-pronged approach. I really want to get to a central philosophy of your work that I take from it, which is about the body keeping the score.

00:26:36 — That's the title of your book. But this idea that the body keeps a record of what has happened and that one of the goals of therapy is to help people feel safe in their bodies. Now, I think a lot of people may not understand what that means. What do you mean when you say we need to feel safe in our bodies?

Bessel Van Der Kolk

00:26:57 — Well, you know, I think Darwin already back in 1872 wrote a beautiful book in which he talks about trauma. Actually, he calls it getting stuck in fight or flight or stuck in avoidance and defensive reactions, which is not a bad definition. And he talks about how these experiences are expressed in the course of the vagus nerve. Darwin calls it pneumogastric nerve back then.

00:27:24 — And that you experience your emotions as gut-wrenching and heart-breaking physical sensations. And I think we all are familiar with that. When something hurtful happens, we do feel it in our chest and we feel it in our bodies, and so our bodies respond to these things. And when you get traumatized, that feeling of gut-wrench and heartbreak really stays with you, and you become an intolerable person to yourself.

00:27:56 — Does that ring a bell with you? Because, you know, I make it a point whenever I travel and go to a place where I don't know the language, I always ask, in your language do they have a word for gut wrench? And every language has a word for it. It's a universal response that you experience deep disappointment and betrayal and fear in your body.

Rangan Chatterjee

00:28:22 — Yeah. I think people have experienced that. If anyone's ever been through heartbreak before.

Bessel Van Der Kolk

They all have.

Yoga

Rangan Chatterjee

Which, yeah, pretty much everyone has been through on some level. You feel it in your hearts, like you literally can feel it, the pain, the discomfort there. So I think when we start thinking about it, it's like, oh, yeah, that's in our body. Like something's happened up here in our mind, we've perceived it a certain way. And then our body is expressing a symptom of that. So I think this is a really good point to talk about some of these practical things that people can start doing to help themselves.

00:28:59 — I mean, frankly, the things you're talking about are helpful for anyone. But can we start with yoga, right? I know yoga is something you talk about as a really fantastic way for many people to start feeling that safety within their bodies. How did you come across yoga? And why do you think it's so effective for so many people?

Bessel Van Der Kolk

00:29:21 — Well, you know, these things are usually an issue of accident, that you happen to meet somebody who does yoga and who says, come and do yoga class with me. And then you do that. And then you feel that your body feels calmer and your mind is more focus afterwards, they say, oh, that's interesting. So actually, so I went to National Institute of Mental Health and got the money to study yoga as a way of calming that body down.

00:29:49 — But now people say, "Oh, yoga is the treatment of choice." I don't know, maybe for some other people, Qigong may be better, or Tai Chi, or some other musical practice. But for me, going to yoga was really a way of exploring to what degree people can change their relationship to their bodily sensations, and yoga turned out to be very good for that. But certainly, it's not the only way. A study I still love to do someday is see how tango dancing works for trauma.

00:30:19 — Theoretically, that would make a lot of sense as being a really good trauma chief, actually. What I see all the time is that the people who are in my life who are traumatized, they go and start exploring different things that help them. And some people find that, let's say, acupuncture is very helpful.

00:30:44 — Other people say it doesn't do a thing for me. So we don't know precisely what is right for whom, but it's very important for us to have an open mind about, and you need to have an open mind for yourself also, So to really see what can help me to feel alive in the body that I live in.

Rangan Chatterjee

00:31:04 — To make sure you're taking action after watching this video, I have created a free breathing guide that's gonna help you reduce stress, calm your mind, and boost your energy. In this guide, I share with you six really simple breathing practices that work immediately. Even just one minute a day will start to make a big difference. To receive your free guides, all you have to do is click on the link in the description box below.

Free Breathing Guide

Rangan Chatterjee

00:31:31 — So is that the commonality then? You mentioned a few things there. Let's say yoga and qigong, for example. You're saying that for many people who are traumatized, they don't feel safe in their body. They don't experience everything that's happening within their body. They shut down in certain ways. And you're saying one method that may work for some people is through something like yoga or Qigong or martial arts, for example, what is it that's going on? You're starting to connect to your body.

00:32:02 — You're starting to connect to your breath. And how do you put it? What do you think may be happening there that's helpful?

Bessel Van Der Kolk

00:32:09 — What happens there is that you are stuck in the stress response syndrome. And for example, when you start breathing more slowly and more deeply and you change your breath, you change your heart rate variability, which is a way of measuring how the heart and the central nervous system relate to each other. And then you get a sense of relief and openness once you are able to do things that calm the system down.

00:32:38 — And so, initially, having somebody work with your breath, you go like, "I don't want to do that." And then, if you learn to breathe much more slowly and much more deeply, you get a sense of, "Oh, I feel calmer, I feel clearer." And what you do actually at this point is you open up some pathways in the brain between your frontal lobe and your insula, a part of your brain that's connected with your bodily sensations, and you open up new pathways of self-experience, basically.

Four Ways To Treat Trauma

Rangan Chatterjee

00:33:09 — Yeah, it's so fascinating. I know when I was reading the section on treatment in your book, after you wrote about what trauma is, you said when you're starting to treat trauma, there was one part where you spoke about this, these four things that need to happen. One, you need to find a way to become calm and focused. Two, you need to be able to maintain that calm in response to things and events and people that trigger you to the past.

00:33:36 — Then the third thing I think was being present. You have to find a way of being present in your life and with the people in your life. And then the fourth thing there was you have to not keep secrets from yourself. Now, the reason I bring that up there.

Bessel Van Der Kolk

00:33:53 — Thank you. I had forgotten those four parts.

Rangan Chatterjee

00:33:54 — Yeah, it was really beautiful the way you wrote about it in your book. And I think what you just said about yoga there speaks to the first one there, which is number one, you've got to find a way to become calm and focused. So for people who are traumatized, if you're stuck, who won't go into certain parts of their body, who don't want to do certain poses or positions because it doesn't feel good, it sounds as though what you're saying is that when people can find some sort of practice that helps them feel safe in their body, whether it's yoga or something else, that it's going to start to help them experience what does calm feel like. Because I guess many of these people don't actually know what it feels like to be calm, even for just 10 or 15 minutes, right?

Bessel Van Der Kolk

00:34:41 — I think what people mainly learn is how to cut off their feelings. So many people learn to not feel. And of course, psychiatry is very good at it also because things like Prozac make you feel less. Yeah. And so you get less overwhelmed by your feelings, but by blunting your feelings, you also lose your capacity for pleasure and enjoyment.

00:35:07 — So a very common adaptation to trauma is to just shut yourself down and becoming that uptight person that manages somehow to make it through your day. But it's in order to recover, you need to open up these pathways of self-experience and that you need somebody who really gently helps you to reconnect with yourself.

Yoga and PTSD

Rangan Chatterjee

00:35:33 — I think you published a study, did you not, on yoga and PTSD from Recollection?

Bessel Van Der Kolk

Three of them, three of them, yeah, yeah.

Rangan Chatterjee

What did they show?

Bessel Van Der Kolk

00:35:42 — They showed us if you do yoga for eight or 12 weeks, that your PTSD scores go down. We did some neuroimaging, and we see some new linkages in the brain coming online, particularly having to do with areas that have to do with self-experience, self-sensory experience. And what the study showed is that when people do yoga, they are more open to being with other people, less frightened of being with other people and less afraid of themselves, most of all.

Rangan Chatterjee

00:36:15 — Yeah, wow. Very, very powerful. It's interesting.

Bessel Van Der Kolk

00:36:18 — But I want to say, it's really, then people say, "Oh, yoga is the answer." No, yoga was a paradigm that helped us to understand how engaging with your body in a particular way is helpful. But it's not the final word on the story.

Rangan Chatterjee

00:36:34 — Yeah, I love that. I mean, that is speaking to my heart. You're really touching on, I think one of the big problems I see around today in terms of thinking about how we treat people with chronic health problems, whether it's trauma or anything else, it's like, what does that narrow reductionist study show? Oh, great. Oh, it works in that study. Okay, great. That means that's the treatment for every patient. And it's like, if you see real people with real problems, you realize that actually there's no one size fits all.

00:37:04 — Like for someone that might be brilliant, but for someone else it may be, it isn't the right thing for them. But I feel like, I say this a few times on the podcast, I think science is important, it's very important. But I think we make inferences and we draw conclusions that we then think are applicable to all.

00:37:24 — Whereas as you say, that just simply showed us that this paradigm here, therapies like yoga, which help us experience our bodies more have the potential to help.

Bessel Van Der Kolk

00:37:36 — So, but you know, in my travels, I meet a lot of people who claim that they do amazing things by doing, let's say equine therapy, working with horses. And it's interesting. And so I collect these people and on our website, the research foundation website, we have these people talk about their system sometimes, and then we do need the evidence.

00:38:00 — So then the next step is always for me to say, so let's help you to do a study where we can really see what is effective for it, who it's not effective for. I think evidence is terribly important, but we see in our field oftentimes that we close the barn door prematurely. We find that if project works some of the time, And for some people say, oh, Prozac is a treatment of choice. No, sometimes Prozac works for particular people. Let's see for whom it works and for whom it doesn't work.

Theater and movement

Rangan Chatterjee

00:38:31 — Yeah, I love that. I think that's a really nice way of putting it. Moving on to another therapy, or I know when I've heard you speak before, you talk about theater and movement. You put those two things together. And I, first of all, I find it interesting that you put theater and movement together when you're, when certainly when I heard you talk about it. But can you elaborate a little bit on what's so powerful about theatre and movement and how it can help people with trauma?

Bessel Van Der Kolk

00:38:58 — Yeah, I'd like to tease this apart a little bit. So the movement issue is terribly important and that's not really part of how we think in psychology, psychiatry, or even medicine. But basically, we express our aliveness through the movements we make. And when you work with children, for example, they explore their movement and their relationship of how their body affects the world around them and how the world around them affects their body.

00:39:27 — And many hypothesis studies over the past 150 years show that trauma oftentimes is related to physical immobility. When you get attacked by somebody, it's very important to activate your fight-flight system and to fight and to punch back. But at the core of much trauma is people being unable to do something to change the situation.

00:39:54 — And so, people go into a state of where their agency no longer matters. And so, and some very good studies in neuroscience also, Jordan Dew has done some of that, that as long as you can move in response to a really challenging situation and do something, you're going to be all right. At the core of what makes something traumatic is oftentimes the inability to do anything.

00:40:23 — And many traumatized people, as you again probably know as a physician yourself, tend to become very passive and tend to sort of ask us for pills and stuff to make their feelings go away, but it becomes very hard for them to do things and to activate their bodies.

00:40:44 — And so movements and doing something that makes your body feel alive and capable is a very important part of being alive.

Rangan Chatterjee

00:40:53 — Yeah, I've heard you speak previously about hurricanes that have happened, you know, big natural disasters. And you were speaking about the fact that, yes, a lot of people are affected, you know, big natural disaster has happened. But the fact that people are coming together, they're helping others, they're moving. You were saying that in many ways that helps them to process the trauma.

00:41:20 — Can you speak to that a little bit at all, please?

Bessel Van Der Kolk

00:41:22 — Yeah, exactly, that we are, you know, we are an extremely resilient species. And we are everywhere. We're almost as good as cockroaches. Like human beings are very stress resistant in a way. And so we can adapt ourselves as long as we're doing things with other people and making things happen. We're building, we're homo faber, we're people who do things.

00:41:46 — And as long as you can do something, you get a sense of, yup, that hurricane sucked and I really miss my house and it's very terrible, but my friends came over and helped me to build a house and wasn't it great that I was able to put a roof over my head again and help people to get supplies, et cetera. So doing something to overcome your helplessness is terribly important, actually. And of course, in medicine tends to be very passive.

00:42:17 — People go to a doctor and they have to be compliant with their doctor's orders. I don't like the word compliance very much because people really need to own what they do and experience what they do.

Stress

Rangan Chatterjee

00:42:28 — Yeah, a few years ago, I wrote a book on stress. And when I'm talking about stress to companies or to people or groups of people. One of the things I often say is that you got to understand the stress response on one level is preparing your body to move, right? It's, you know, the predator, the lion, the tiger, whatever it was, you're getting ready to move.

00:42:52 — But if it's your, if you're sat on your bottom, and it's your email inbox, that stressing you out, and your workload, and the fact that you're on zooms for 10 hours in a row, So your body is getting primed and ready to move, but because you're not moving, that it almost gets stuck and you're not processing the stress energy that's built up. Do you think that's accurate?

Bessel Van Der Kolk

00:43:16 — Well, I think it's accurate. I think it's a very, very important issue in our current culture.

Rangan Chatterjee

00:43:21 — Yeah.

Bessel Van Der Kolk

00:43:22 — We become more and more virtual, living in virtual realities, including you and me. I really enjoy talking with you, but if we sat in the same room together, we would actually have a relationship afterwards. We don't really form this sort of bond that you

ordinarily form with other people by interacting the way we do. And I think it's a major challenge for us to really look at the impact of that.

00:43:48 — And I think it's going to have a major negative impact on us as human beings to become, to sitting on our butts and living through a virtual reality and virtual with people. But it's a very big issue. I don't think we know very much about it because it's a relatively recent phenomenon, but it's something worthy of a great deal of attention.

Rangan Chatterjee

00:44:09 — It's really interesting as I think about your writings about trauma, about movements like yoga, for example, that can help us feel safe in our bodies. And then what we're just talking about, the stress response and actually without movement, we can't really discharge that energy. It's very hard. And I've been thinking about this for a few months now, it's very hard to not draw the conclusion that movement and exercise, whatever you want to call it, for many years has been talked about through the lens of physical health.

00:44:43 — And I think we're now becoming more and more aware that yes, movement is very important for our mental health as well, but I actually think it goes beyond that. It feels to me as though if we're not moving our bodies in a whole variety of different ways, we can't actually express and tap into our full potential as a human being, right? It's that important to who we are, I believe.

Bessel Van Der Kolk

00:45:07 — Yeah, I'm with you on that. That's something that we get a sense of pleasure from, being engaged with our body. Pleasure is a very somatic response. And I think people don't talk much about pleasure, but I think pleasure is a very important part of life. You need to have a sense of, and when I get together with a friend, like this weekend, numbers, and you have arguments about stuff, and you move together, and then you get a feeling of, wow, life is worth living, because I really made that connection with that person, distance together with that person.

00:45:42 — And I'm very concerned about the virtual world that we're moving into, yeah, in that regard.

Theatre

Rangan Chatterjee

00:45:48 — Let's talk about theatre.

Bessel Van Der Kolk

Yeah, I'm glad.

Rangan Chatterjee

Because we've mentioned, you know, yoga, then movements, in terms of really practical things that people can take away from this conversation to go, oh, I wonder if this will work for me, I wonder if this is useful for someone in my life. Theatre and Shakespeare, that I've heard you talk about is fascinating. So tell us what's going on there? What's, you know, how can this be helpful?

Bessel Van Der Kolk

00:46:16 — Well, you know, let's start, I'm a developmental person, and hadn't actually just spent some time with my grandkids, and they're always playing different roles. “And now I'm going to be an astronaut”, and they try it out. “And now I'm going to be a hunter”, and they try it out. And that's how human beings learn what it feels like in your body to have different roles. What struck me with traumatized people is at some point, the identity becomes an identity of defeat.

00:46:46 — I used to be a warrior, but now I cannot move anymore. I used to be a sexy woman, but now I'm frozen in my body, or a sexy man for that matter. And so trauma sort of fixates people in a particular role in life of which has to do with helplessness.

00:47:05 — And when I look at my kids, and then we have this wonderful theater in the area where I live called Shakespeare in the Court, where they teach juvenile delinquents who are all of terrible trauma histories to play Shakespeare roles. And they get to feel, “Oh, this is what it feels like to be a king. This is what it feels like to feel powerful. This is what it feels like to be a murderer.” And then you get to, on a visceral level, experience the very different multimodality of ourselves.

00:47:42 — And we get to really feel, “Oh, I can be powerful, and that's what it feels like.” But you cannot be powerful until you actually hold it in your body. And so playing Macbeth gives you a feeling, “Oh, that's what it feels like to be a warrior, a nasty person.”

00:48:02 — And you can play these different roles, and theater helps you to really viscerally experience other ways of moving in the world than your ordinary habitual responses.

Shakespeare

Rangan Chatterjee

00:48:14 — Is it right that where you live, that juvenile delinquents, when they're up before the judge, they're often given the choice between, you know, jail time or detention center time and learning Shakespeare? That's what's actually happening?

Bessel Van Der Kolk

00:48:31 — No, not learning Shakespeare. To act in a play, it is doing. You learn sword fighting, and that's a very, very complex thing to do, is to learn to all that sort of stuff. But

once you do that, you feel like, wow, I can defend myself, I could really be a powerful person. So you need to have a visceral experience of power and control that has been taken away from you by your trauma.

Body Positions

Rangan Chatterjee

00:48:57 — Are we seeing that those kids then are improving? I mean, can you tell us any stories what's happened to these kids? Because I think it sounds, I can believe that rashly. It's, you know, I think we, we all know, maybe we don't think about it, but if you stand up tall with your chest puffed out, you feel completely differently. You feel powerful and strong. And if you roll your shoulders and compress your ribs, you, you feel a bit insecure.

00:49:26 — And, and, you know, I think we can get that. So it totally makes sense to me that, as you said, a lot of people who are traumatised get stuck, they get stuck in, I guess, certain body positions as well, right?

Bessel Van Der Kolk

00:49:38 — Yes, absolutely. Yeah, body positions of defensiveness, of collapse. And the way you hold your body and you put it very well, because the research shows exactly what you say, is that when you put yourself at a position of, let's say, there's a body position that denotes joy.

00:49:59 — Every culture in the world, you raise your head, you open your mouth, you open your ribcage, and when you freeze people in a bodily position of joy, and you say to them, «Now I want you to be angry". They say, "I can't be angry as long as I stand like this, because in order to be angry, I need to stand like that." And so it's really important to honor that piece of knowledge by helping people to experience different states of being by the way you hold your body.

Evidence-Based Therapy

Rangan Chatterjee

00:50:31 — So on that then what happens like you know I love the idea that around the world people you know juveniles who have committed crimes who've been traumatized are offered this or other modalities as a way of rehabilitating themselves experiencing different feelings and sensations like how did it get to the point where the judge is now saying this, I mean, was were trials done? Was there, you know, growing evidence space?

00:51:02 — What happened to make that a reality? Because that sounds really quite profound.

Bessel Van Der Kolk

00:51:06 — These things always start with individuals who are charismatic, who convince some other people to work with them on something.

Rangan Chatterjee

00:51:15 — Yeah.

Bessel Van Der Kolk

00:51:15 — So we always, this always starts before there's evidence. And I see this all over the world, that wherever I've gone, I see amazing programs done by charismatic individuals. But then when the charismatic individual dies or becomes old to do something else, the programs die. And so what I'm very much in favor of and trying to promote is when you have this good method, then we do the research and we make it evidence-based.

00:51:43 — But for example, I've never been able to get money to do a tango study. I've never gotten the money to see what choral singing does for people. But I have a friend in Russia who studied choral singing and showed how it changes the brain. But as long as you're frozen in that three dead disorder, then singing and theater and yoga and all kinds of other things may not cross your mind as being effective.

00:52:12 — If they say, oh, that's woozy. But so I'm very much in favor of people actually studying a whole bunch of different things and see how effective it is.

Equine Therapy

Rangan Chatterjee

00:52:21 — Yeah, it's kind of what you were saying before about, you may hear someone saying that equine therapy is working for this group of patients. So you're going, okay, that's interesting. So you start off open-minded, you believe people and go, okay, that's interesting. Let's now study that, let's... And I think that's what the scientific method should be really good for, is like we, we listen to humans and real people who are experiencing things. And instead of poo pooing it going, isn't that interesting? Why don't we try and get some real scientific validity behind that so we can expand it out? I think that's a really beautiful approach to take that would help so many more people. See, it's a paradigm issue.

Bessel Van Der Kolk

00:53:02 — And so right now, if you're a psychiatrist or other medical person, and you start talking about theatre, your colleagues will go, "He's gone off the deep end." It's amazing how many people, how many times my colleagues have said, "oh, he used to be quite good, but now he's studying yoga, so he has gone off the deep end." "Oh, he used to be good, but he's now studying EMDR, this crazy method where you build your..." "Oh, he's gone off the deep end."

00:53:28 — I've been accused of having gone off the deep end so many times in my academic career. And so most people are, and most academicians want to be respectable and get money for their research. And if you go this route, it's not very likely that you will get a lot of financial support.

Dealing with Criticism

Rangan Chatterjee

00:53:46 — On an individual level, how did you cope with that kind of criticism? Because a lot of the things you're talking about are certainly things that are not conventionally taught to Western medical doctors. But how was it for you as a respected academic clinician when you started getting this pushback?

Bessel Van Der Kolk

00:54:06 — Well, I used to be, with respect to academic clinicians, when I studied drugs. I did the first studies on Prozac and Zoloft. And at that time, my star was high. But once you start doing other things, but, you know, that's a characterological issue. I'm just a guy who is curious, who likes to explore new things. And so respectability was not my most important thing in my life.

00:54:36 — And so character is destiny. And so I'm a person who likes to explore many different things. I'm a person who speaks several different languages. And so I can think in different paradigms. And so that made it possible for me to look at different options. And that's just a question of character.

EMDR

Rangan Chatterjee

00:54:57 — Yeah. You mentioned EMDR. EMDR, of course, is another therapy that I've heard you speak about that can be helpful for certain people with trauma. What is EMDR? And can you explain a little bit about your experience with it? You know, when did you find out about it? What can it be helpful for? How do people do it? They do it themselves with a therapist. Maybe speak to EMDR a little bit, please.

Bessel Van Der Kolk

00:55:24 — Look, EMDR is indeed a very strange treatment where you call, ask people to call up the stuff that really bothers them, but not to talk about it. To just say, remember what you saw. Remember what you felt in your body. Remember what you were thinking back then. So become aware of that. And then you ask people, so stay there. And then you ask people to, you move your fingers in front of people's eyes from side to side, and you say, just follow my fingers.

00:55:54 — Now, if there ever was a crazy treatment, that's a crazy treatment. And so my and everybody else's first reaction is like, that's bizarre, don't listen to that stuff. And then some of my own patients who I'd worked with started coming back and said, I did an EMDR and I see profound transformations. And some of my colleagues started doing it and they showed me their videotapes and I go, that's a dramatic change.

00:56:19 — And so I see my patients and I see the videos of my colleagues and I say, that's clearly changed the brain in very profound ways. And being sort of a neuroscientist oriented person, I became fascinated by studying what does eye movements do to the brain. It took us 15 years to get enough money together to begin to do that study. But it started off by doing a simple study comparing EMDR with Prozac.

00:56:47 — And it turned out that these eye movements caused a very significant change in most people. And so that was the first time I studied a method that didn't fit in with the Western paradigm. And the Western paradigm is you yak or you take a drug. And now you did something else. And then from EMDR, I learned that things that don't fit within our cultural paradigm may work.

00:57:16 — And so then some other people say tapping acupressure points may be helpful. And I say, what's the evidence for that? There is no evidence for that, and then we study it, and it turns out that tapping these Chinese acupressure points indeed seems to have an effect on people's physiological arousal.

00:57:36 — But EMDR was particularly important here for me, both because it was my first foray into something that didn't fit with the paradigm, and our results were extraordinary. We had a 60 percent cure rate with EMDR. In a trauma sample. Now nobody's ever achieved 60% cure that all the symptoms were gone. And I think because it's so strange and doesn't fit with our paradigms, many people tend to still poo-poo it even though the evidence how well it works is very clear.

00:58:13 — But so EMDR helps you to actually neutralize the memory. Part of being traumatized is that certain remembrances, certain events freak you out, make you upset. And what EMDR specifically does is those particular triggers to past events get calmed down and you don't longer get freaked out by the memory of particular traumas.

00:58:40 — And then people have a method, and then they say, oh, let's use it for children who are chronically abused and in orphanages. I said, no, that's probably not the right treatment for them. So it's important to also know for whom it works and for whom it doesn't work.

00:58:58 — And what we showed in our research is that people with longstanding histories of child abuse, it didn't work all that well for them, at least in the way that we did it.

Rangan Chatterjee

00:59:10 — You know, in your book, which I think, was it published in 2014 for the first time? Yeah, it first came out 2014, yeah. 2014, right? And I've got the page up in front of me. While we don't yet know precisely how EMDR works, the same is true of Prozac.

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00:59:36 — And it's a very powerful paragraph that at the end of chapter 15. Whereas that was, you know, what, eight, nine years ago now when you wrote that. So certainly when it was published, you probably wrote it 10, 11 years ago, that section. Do we now know how EMDR works compared to when you actually wrote that book?

Bessel Van Der Kolk

00:59:57 — Yes, so my colleagues, Shereen Herzarian and Ruth Lanius and I did a study where we put people in a scanner and made eye movements. And you saw that it activates certain circuitry in the brain. And the circuitry in the brain that it particularly activates is the salience network, the part of your brain that determines whether something is relevant or not.

01:00:23 — And so what we see with the people who lie in the scanner is that their brain organizes the experience in a different way by creating new circuits of experience. And so it is not about understanding or insight, you just sort of tweak the brain circuits in a way that helps you to not be overwhelmed by it. You don't erase it, but it becomes a memory. Yeah. So a traumatic experience is not a memory, because the moment you go there, you relive it.

01:00:53 — That's the nature of traumatic stuff. If you have been raped, you get really upset, thinking or talking about your rape, but it is not a memory of something belonging to the past. You currently, right now, recreate the physiological state of that past event. And what EMDR and to some degree yoga and neurofeedback and our psychedelics all seem to help us to do is to go there and to reorganize our perception of it and become aware on a very deep level of “this happened to me back then, it's not happening right now.”

01:01:34 — And so some circuits in the brain change that allow you to put it in the past and say, “Yes, this happens, this is awful, but I'm not feeling it today.”

Rangan Chatterjee

01:01:44 — Yeah, yeah. Very clear, very clear, thank you. Would you say EMDR should always be done with a therapist? And the follow-up from that is, there's a lot of what are called EMDR music tracks available now on streaming platforms, which I know people like listening to. I don't know if you have any experience of the music, what it might do for people. Is that something quite different from what you're talking about in terms of seeing an EMDR therapist to take you through that process?

01:02:13 — I wonder if you could speak to that a little bit, please.

Bessel Van Der Kolk

01:02:16 — Interesting. Actually, I cannot speak about it because I have not studied that. And see, I'm so aware that trauma is about shame and about being disconnected from other people that I actually love the work of joining somebody and helping me to deal with it in the context of a relationship with somebody with whom you no longer are ashamed about what's happened to you.

01:02:44 — So I'm not really a fan of mechanical devices because a lot of recovery from trauma is to reestablish your capacity to connect with the people around you. But that's my particular prejudice in a way.

Rangan Chatterjee

01:02:59 — Yeah, I probably would have that slight bias as well in general. And I do wanna get to psychedelics and neurofeedback that you've just mentioned. But just to sort of close that loop a little bit, yoga, which we started off talking about when we talked about the sort of things that people can do to heal from trauma. I guess you would encourage people to do yoga as part of a group, rather than by yourself on YouTube, right?

Bessel Van Der Kolk

01:03:31 — Yeah, absolutely. I'm really impressed. I'm not a natural yoga person. But if I'm in a group with other people who are much more limber than I am, and do a much better job than I, I sort of absorb their limberness, and I enjoy doing it with other people. And I think that's true for many things. I psychedelic therapies also these days.

01:03:55 — We sometimes do psychedelics in groups and I like it a lot because you experience that I have one particular experience and you have a different experience and then you really get to see that I'm part of mankind and I'm holding something that we all hold in different ways. And I think the feeling of emotional isolation or the word I used in the previous book a lot, not in this one, is the feeling of being God forsaken is a very important part of trauma.

01:04:25 — So I think doing it in groups of other people adds a dimension of humanity to the whole thing.

Rangan Chatterjee

01:04:33 — Yeah. And just before we get to neurofeedback, just on that point, talking about the Western medical system and how it's set up, it's very individualistic. You know, we see a patient in isolation. We say, this is what's wrong with you. And this is what you need to do. And I touched on this in my last book a little bit, that maybe we've got the whole setup wrong for certain people, because there's a movement in the UK called social prescribing that's growing massively where people are healing in communities. They're going to, let's say, cooking classes or reading things, or, you know, there's something called park run in the UK, where people go every Saturday morning in all the villages and towns. You know, maybe 150, 300 people get together, and they complete 5k together—some walk, some run—but it's a very community-orientated environment.

People are healing in communities, not in isolation, which I think really speaks to what you're talking about.

Bessel Van Der Kolk

01:05:35 — We're all watching the British baking show around the world. Of people cooking together, making food together. And it's interesting, this point. When trauma was sort of reinvented or rediscovered, I'd like to say Boston was to trauma, Vienna once was to music. And we had a group of people in Boston, like Judy Herman, Eli Neuberger, and Terry Keane, and other people who all were deeply into trauma.

01:06:03 — We talked to each other, and our initial treatment was always group treatment, Because we didn't know what it had been like to be raped or to be marine in Iraq or Afghanistan, but they did. And so we found that getting people in a group who really have been there decreased people's shame and also gave a lot of recognition to people. It is actually quite horrifying to me how group treatment has sort of become a very tertiary treatment.

01:06:33 — And of course, in the addiction community, group treatment, self-care programs is still central. And the sense of community of people who have had similar experiences is terribly important. And I'm actually sort of pushing people to go back to do much more group treatment, where if let's say you have been molested and you deal with it by cutting yourself, it's shameful to cut yourself.

01:07:01 — But we need a group of other people to say, "You know, when I get really upset, I cut myself, or I put a burning cigarette out on my arm." Other people don't get it. "You should never do that." You go like, "Oh, yeah, I cope in the same way, and I also feel very embarrassed about it. But what does it do for you? It actually helps me when I do that."

01:07:23 — So you have the potential of meeting people who are much more understanding about what you go through than somebody who's gone to medical school.

Rangan Chatterjee

01:07:32 — Yeah, no, 100%. And they can all help each other, of course, probably in a much more powerful way than a doctor or a healthcare professional who's never experienced that. Neurofeedback, what is it? I know you think it's, or you've shown that it's a powerful therapy potentially for people suffering from trauma. Can you explain what exactly it is? Does it help us rewire our brain?

01:07:57 — Who is it helpful for? All kinds of things like this.

Bessel Van Der Kolk

01:08:01 — So neurofeedback is a method that you can put electrodes on people's skulls. And our technology is good enough right now that despite the fact that the skull is quite sick, you can actually harvest these electrical brainwaves that are underneath the skull. And by putting a number of electrodes on people's heads, you can project the

brain's electrical activity on a computer screen. And you can sort of see what part of the brain is talking to what part of the brain and what is most active and what's most inactive.

01:08:33 — And we have pretty good ideas about what sort of electrical activity helps with optimal functioning. And oftentimes, when we do this, what's called quantitative EEGs on traumatized people, my reaction is, "Oh my God, how can you have a life for yourself? Because your brain is really messy." I don't say it to people, but you see some very serious disconnection between different parts of the brain, which people can sometimes compensate for.

01:09:02 — But by having a map of the brain, you can say, okay, we can now play computer games with your own brain waves, where whenever your brain creates a sort of brain connections that are good for you, a little color changes or some music changes. So you play back feedback to people's brains of, that's good, and if you don't make the right brain forms, sort of brain forms that make you angry or hyper aroused, you don't get feedback.

01:09:31 — So you can sort of subtly give people a little sensory feedback through sounds and images of, yeah, make more of that. So you can train the brain to make different connections. It's not a trauma treatments. It's a brain organization treatment.

01:09:48 — I'm astounded that this is not done more widely and more often because it makes a lot of sense from a scientific point of view is that you can actually visualize these things and you can actually sort of nudge the brain to organize itself in a different way. And so what's been stunning to me is that there's a guy in London, John Gruselier, who has done good research, some people in Belgium, some people in Germany, and Ruth Lanius.

01:10:20 — We are among the few people who actually have studied this brain-computer interface methods. I think it's enormously powerful. We have done studies with kids who are just completely off the wall, unable to go to school, unable to learn, and we can calm their brains down so they can actually focus and not get out of control.

Rangan Chatterjee

01:10:43 — So this can be for many of us with depression, anxiety, chronic stress, kids who feel out of control. It's just a way of harmonizing yourself a little bit with your brain, right?

Bessel Van Der Kolk

01:10:56 — Yeah, right. And I, you know, my dream is that every school in America has a neurofeedback system and a neurofeedback capacity. So when kids come to school, and they're just off the wall and terrified and angry because they have all these experiences they have just had at home, that you can help these kids to calm their brains down so they can actually learn and get along with other kids. I wish every medical clinic had neurofeedback.

01:11:24 — It is such a nice, simple way of just helping you to smooth out your brain functioning.

Rangan Chatterjee

01:11:31 — Yeah, I like you, I'm a fan of people healing with others in real life, you know, I get it. There's a lot of great tech out there to help, but I think we've got to be not too reliant on that where possible, make sure we're experiencing things in the real world. But there are some apps, I think now, where they help with things like coherent breathing and you can, you know, they can help you harmonize various parts of your body and your brain through different methods.

01:12:00 — So I think technology is going to potentially revolutionize this. Have you experienced that as well? Have you come across apps like that?

Bessel Van Der Kolk

01:12:07 — Oh, absolutely. And I know those apps and actually have those apps in my phone. But I'm also impressed with is how I don't use them. Even though I know how helpful they could be. And sometimes I do get a little unfocused or whatever. And I know, and what I'm impressed with is that if a friend of mine calls me, "Are you going to come to this class? Are you going to go for a walk?"

01:12:33 — That's rewarding enough for me that I will actually do it. But apps in and of themselves, most people just don't love their apps. To say, let me just, the interpersonal process is still a very rewarding part. So doing it in a group of people who say, "Where were you last night when we did this?" That's who we are as human beings.

Rangan Chatterjee

01:13:00 — Do you know what's really interesting, Dr. Van Der Kolk, because if I, this is not relating to trauma at all, but a few months ago, I spoke to this chap called Eliud Kipchoge on this podcast, the Kenyan marathon runner, the only person to have ever run under two hours in a marathon. He's considered the fastest marathon runner of all time. And, you know, it was a beautiful conversation with him about all kinds of things. And one thing he said, well, many things, but one particular thing really struck me.

01:13:30 — He never trains alone. Ever. He never goes to a run alone. Whereas in the West, we often run alone where, you know, we do it to de-stress or unwind by ourselves. He goes, no, no, we always run together. And he says, if you're, you know, if you're not showing up or your motivation's not there for a few days, one of your buddies is going to be on the phone and say, Hey, Elliot, where are you? What's going on? Is everything okay? And it really struck me how much culture plays a role here. I thought, wow, this incredible athlete, the fastest marathon runner on the planet never goes for a run by himself. It's always in a group.

Bessel Van Der Kolk

01:14:07 — Yeah. And I think that's who we are. You know, I just was lucky enough to go on to the Serengeti Plains. I got to see all these animals. They all live in groups. Mammals live in groups. Human beings live in groups. That's how we define ourselves, that's our identity, that's our reward system. And, you know, there may be people out there who just love their little apps, but they don't know many of them.

01:14:36 — And the apps are really quite wonderful.

Rangan Chatterjee

01:14:39 — Yeah, but I guess you wouldn't know them because they're at home on their apps. So you wouldn't be interacting with them potentially. But I think it's a very, very important point. We must just briefly touch on psychedelics. You mentioned group psychedelic therapy. And of course, psychedelics are getting a lot of media. They're all the rage. They're still illegal, of course, in many countries, I have to say that. Where do you stand at the moment on the use of certain psychedelics as a treatment or as part of the treatment for people suffering from trauma or other mental health issues?

01:15:13 — You know, what where does what does the evidence say at the moment? And who do you think it might be useful for? And who should be cautious? Would you say?

Bessel Van Der Kolk

01:15:20 — So luckily, this is not just an issue of opinion. My lab actually does psychedelic studies, and I'm really very happy to be part of this burgeoning thing. We do be a part of the studies, and one of my papers will come out specifically about what psychedelic can do on the basis of research. So I have a license to give MDMA ecstasy to people and part of a larger study that's almost done.

01:15:51 — I have good data and the only psychedelic-like substance that's legal in America right now is ketamine. I'm involved in training people in ketamine-assisted psychotherapy. I know ketamine quite well. I know MDMA quite well.

01:16:09 — I don't know psilocybin from a research or personal experience well, but we all talk to each other and I see the beautiful work that's being done. Started at Johns Hopkins and let me give you an example. A friend of mine who is a very major person in trauma field and the person who we all deeply love developed severe cancer eight years ago and he was angry, bitter as one would be when he had the diagnosis.

01:16:40 — He joined the psilocybin study at Hopkins, and I visited him, and he said—he started to cry—he said, "It's an amazing experience. My friend doesn't have a mystical bone in his body. And he said, 'I was blasted into the universe. And I had these visions of little villages with smoke coming out of the chimneys, and all my ancestors were there, and they were waving at me and said, hi, yes, good to join us.'"

01:17:10 — We all, we are all here and we all die. And it's part of life. And my friend had this mystical experience and he accepted his death, except he's still alive eight years after we all thought he was going to die, which really makes me very intrigued. We really

should study whether the psychedelics changed the immune system to actually change some of the bodily stuff.

01:17:35 — This is an interesting issue. But what happened to my. Frank was a very important inspiration for me to look at how psychedelics can be helpful. And one of the reasons I got intrigued with it is, of course, I'm from the 60s generation. I had good experience with the LSD when I was a young man and then became all straight and have done it for a long time. But I do remember from taking LSD back then is how it opens up your mind.

01:18:05 — And it makes you aware of that the reality that I've constructed for myself, is just a very small part of the overall reality that surrounds us. And you become really aware of that your reality is your own personal construction. And by having the psychedelic experience, you see that the universe is much larger than the universe that you that you actually live in.

01:18:30 — And that's actually what we see when people do psychedelic therapy is their mind becomes open to new possibilities, to become more curious about exploring new things. I have a number of friends who are very famous scientists and I've asked all of them, they're all about my age, I said, do you take LSD in college also? They said, yeah, of course I do.

01:18:54 — I said, how do you think it affected your career? And every one of them says, you know, I think I became a good scientist because the psychedelics made me realize that the reality that we have defined for ourself is just a small part of what there is, and it made me a more open-minded and curious person. Yeah.

And that's very much what we see in our psychedelic treatments, that people oftentimes go into their trauma, and it's no picnic, it actually can be very painful, and people may lie there and cry and say, "Oh my god, oh my god," but it opens them up to actually see themselves and to visit themselves. And what our research shows—soon to be published—is that psychedelics lead to a dramatic increase in self-compassion, and people really feel for themselves and have a sense of compassion for themselves.

01:19:55 — It also makes people much more aware of who they are. It also makes people more aware of how who other people are. So they're much better able to negotiate interpersonal conflicts and interpersonal relationships, because they really get exposed to a larger reality that they ordinarily are locked into.

Rangan Chatterjee

01:20:14 —So for a person who has suffered trauma, when they go through a psychedelic experience, let's say in your lab or in your studies, it opens up their minds. They see what that the story they've constructed is it's just one story. There are multiple other stories they could construct around that.

Bessel Van Der Kolk

01:20:39 — Dimensions also, visiting your trauma gets you always stuck because your body keeps a score. And the moment you go back there, you feel that agitation, you feel the terror. And you want to get away from it as fast as you can. And there's something about both psilocybin and ketamine and MDMA, because we have seen it in all three, that allows people to go to these dark places and to not get engulfed by it, to not get hijacked by it and to plunge into a traumatic state, but to also get to feel different dimensions and to understand things in a different way.

Rangan Chatterjee

01:21:15 — Yeah, and that self-compassion piece you mentioned, And of course, very, very important for any healing is if you come out of that, feeling more compassion for yourself, less shame, less guilt, of course that's gonna help.

01:21:27 — In anything further that you do. Are there any downsides, as these things become more and more in the mainstream and people talk about them and more and more people are trying psychedelics and of course, there's plenty of good research showing how helpful it can be. Can it be harmful for some people? You know. I'm so glad you bring this up.

Bessel Van Der Kolk

01:21:49 — I tell my colleagues, we're in the honeymoon phase. And so I have a team of people who are 20, 30 years younger than I am. And they say, we're part of the revolution. And I say to them, you're part of the second revolution, because I was, I had Timothy Leary's old office at Harvard at some point. I was the tail end of that last revolution. And that revolution collapsed, in part because of politics, but also in part because people got way too careless and really got out of control.

01:22:21 — And I'm really afraid that things will get out of control again. These are very, very powerful substances. The way we do our study is extraordinarily careful. We get to know people really well. They have two therapists who are with them the whole time. Set in setting is everything. We have relationships with the people who we treat, and they feel safe with us.

01:22:46 — And so right now in our study, we just opened up the second study. First one was 91 people, the last one is 103 people. And again, we have no significant side effects, but we have no significant side effects because we pay so much attention to certain settings. And what you see already, as there's money in Dandar Hills, you can go to a ketamine infusion clinic where you go to a little cubicle, get an infusion, and nobody is there with you, and you can ring a panic button if you become really upset. That horrifies me. Blowing your mind is a potentially very dangerous thing, and very painful and horrible things can become manifested, and you need to really create a very careful container for it.

01:23:39 — And I'm worried it will blow up again, yeah.

Rangan Chatterjee

01:23:43 — Yeah, I just would love to just think about what can trauma teach us as members of a society because you said something very profound once, victims are members of society whose problems represent the memory of suffering, rage, and pain in a world that longs to forget?

Bessel Van Der Kolk

01:24:11 — You know, when you quoted me, I always go like, I wish I had written that. It's so good. And then it turns out I had written it.

Rangan Chatterjee

01:24:18 — Yeah, I mean, they're your words. And I think they are so profound. Because, look, let's be really clear. Traumatic experiences are horrible. They're causing all kinds of problems for people. Hopefully the conversation we've had the work you are doing is going to help people first of all become aware of that and then start to make changes maybe some of the modalities we've already spoken about.

01:24:43 — But I do wonder what can we as a society learn from trauma traumatic, you know, traumatize individuals? You know, is there any upside? Is there anything that you know for society is that I've got to be very sensitive how I say this, but I'm just saying every bit of adversity in life tends to have an upside at some point, whether we're ready to see it or not. And I just wonder with all your experience, are there any upsides and what can we learn as a society from looking at people suffering from trauma?

01:25:17 — I think the big message is.

Bessel Van Der Kolk

01:25:20 — People generally do the best they can. Yeah. And that's very important. And so, one of the things that is very gratifying about the work that I do, I see a lot of people who have gone through experiences that I cannot imagine having been able to survive. And you see what people have done to survive, and they may have done weird things, like become addicted to heroin in order to survive, but it was their way of survival.

01:25:46 — And so I think what trauma really teaches us is that people do the best they can to survive, and that being punitive and nasty to people who do things that you don't like is probably not the best way to help them. And that you need to really, it's very important that people do get traumatized if you yell at them, if you scream at them, if you put them in seclusion and to become aware of the potential damage we can do to each other but also how being heard and being in connection with people is terribly important for all of us at every stage of our lives. And that to honor people's reality also.

Rangan Chatterjee

01:26:31 — Yeah, I think many of us are familiar with certain pieces of art or songs or some just quite beautiful pieces of music that have come from trauma. So yes, that individual

has had extreme pain and suffering. But what has come out of that has brought such joy to so many people. I don't know why.

01:26:57 — Again, I'm very cautious as I say that because I don't want to at all come across as someone who is undermining how painful those experiences are. I'm just trying to maybe at the end of this conversation, leave a slightly the uplifting sort of tone there?

Bessel Van Der Kolk

01:27:14 — You know, this is not a scientific statement, but I think most really truly innovative things in our world are discovered by traumatized people because they live in a world that's unbearable. And so they have no choice, but to find new ways of coping with things that is different from where they live, because if they would keep doing the same thing, they would die. A great example is Isaac Newton, the greatest physicist who ever lived.

01:27:48 — And then you read his biography. This guy had the worst possible childhood. And so he hid himself into mathematics and physics, and that was his safe place that allowed him to create things. J.K. Rowling, the author of Harry Potter, she was a very traumatized person who, I don't know about details, I've never met her, but she was a very messed up traumatized person until she started to put it together in these Harry Potter stories that actually come from the visions of a traumatized person. And she gave this unbelievable gift to the whole world of people to be able to imagine new possibilities.

And you see this over and over again. And part of the of the pleasure of my job is when I really get to know people, I get to see how they have found their particular ways of surviving.

01:28:46 — They don't all become like Isaac Newton or JK Rowling, you know. It's still an exceptional talent. But traumatist people have new ways of pointing things out to us. We can learn from them.

Rangan Chatterjee

01:29:03 — Dr. Van Der Kolk you are doing a great service to the world all your work the book literally it's such a phenomenal read I can see why it keeps selling year on year and it keeps spreading through word of mouth it's absolutely incredible thank you for making time.

Bessel Van Der Kolk

01:29:19 — Thank you. Just you know yourself also I'm really impressed with the depth of the questions you asked me I really really liked it a lot yeah.

Rangan Chatterjee

01:29:26 — Oh thank you I appreciate that just just very very finally for anyone who's listening right now, or who's watching, who feels stuck in their life, who feels the

way that they are right now is the way that they have to stay, the way they have to remain, and they feel no hope, no possibilities for the future, what would you say to them?

Bessel Van Der Kolk

01:29:57 — I would talk about what might be available. Have you tried yoga? Have you ever sang in a choir? I always take very careful histories about when did things work for you? What were you doing when you did not feel this way? What sort of relationships were you in?

And I try to help people to not only remember the horrors of their past, but also that kid a long time ago who was able to do this and who coped somehow and to really revisit yourself as a survivor to see what has worked and what hasn't worked, what gave you a glimmer of hope, and then to look around in your environment, would sing in a choir work, would doing martial arts work, would go to yoga studio work, to really look at what it is in your culture that might help your body to feel at home or safe or a feeling of pleasure and engagement.

Rangan Chatterjee

01:30:59 — Dr. Van Der Kolk, thanks for coming on the show.

Bessel Van Der Kolk

Thank you very much. It's a pleasure.

If you enjoyed that conversation, I think you are really going to enjoy this one all about addiction, trauma, and why so many of us feel lost.

01:31:13 — Addiction is the most human thing there is. All addictions, the attempts to gain pain relief, emotional pain relief or something or another. Then this whole society is so expert at selling us stuff to fill those holes temporarily. This is the whole ethic of this culture.