

Psychedelics Offer New Solutions for Social Isolation – Dr. Julie Holland with Dave Asprey – #757

Announcer:

Bulletproof Radio, a State of High Performance.

Dave Asprey:

You're listening to Bulletproof Radio with Dave Asprey. Today's guest is a psychiatrist and psychopharmacologist named Dr. Julie Holland and she's researched throughout her career drug dangers, drug use, MDMA, cannabis and psychedelics, but not just dangers, some of the good stuff as well. You've also seen her on the Today Show, Good Morning America, CNN, Dr. Oz, Vice, NPR, and a long list of other places where world-class experts would show up, including Bulletproof Radio. She's got a new book called Good Chemistry: The Science of Connection from Soul to Psychedelics, and she looks at the science of connection, why we need it, how we've lost it and how we might even find it again. I thought she'd be particularly appropriate for you today because there's a pretty good chance that if your face is wrapped in cloth, it might be harder to connect with other people and if you're locked at home for months on end without seeing more than a couple of people, it might be hard for you to find connection.

So let's bring in an expert about connection and what it does for us, how to get more of it and how to do it all safely with or without drugs. Julie, how was that? How was that introduction?

Dr. Julie Holland:

Yeah. Let's talk about that. I think that sounds like a fine introduction.

Dave:

It's been a long time, since you were on the show, you were on episode 231, and we talked about hacking orgasms, medical ecstasy, antidepressants, and how to get off of them and why women need testosterone. So it's been 600 episodes they're about-

Julie:

Wow.

Dave:

... so I know you've done a lot of work since then and so have I, so it's time for us to get caught up on all kinds of fun stuff including MDMA, because it's changed a lot and maybe we could get started there because you have the stereotypical, what you see in a movie, "Oh, I took my MDMA and now anyone wearing fur I just have to touch them." Since then, it's been more... MAPS is doing work. We've had all these studies come out to say this actually works for PTSD and for people who are really having problems, where are you on the subject of MDMA now?

Julie:

Well, I am now where I've always been since 1985, which is that, boy, this would be a very useful tool for psychiatry. I mean, that was my original thought back when I was a sophomore at Penn, I was a pre-med and I was studying psychopharm when I first heard about MDMA and the way I heard about it was that some therapists and psychiatrists were saying, "Hey, we were using this in our practice and we were getting good results with it and now you're making it illegal." So I got in touch with these therapists and

psychiatrists and heard a little bit more about how these MDMA assisted psychotherapy sessions were really effective and efficient. Good therapy takes years and it's like peeling an onion and then people get... It's like peeling an onion if the onion were defensive and ran away every once in a while, right? It's not even as simple as peeling an onion because as you start getting closer-

Dave:

That's the best description of psychiatry I've ever heard of, by the way. I think you just broke the internet with that one.

Julie:

Right. If the onion stopped answering your calls for six months every once in a while, because you got too close to something. So there's a lot of defensiveness and fear built into good psychotherapy because it is sort of like surgery where you're trying to dig down and get to these malignant things that are causing problems that need to be removed and examined. But it's like surgery without anesthesia to dig down to these malignancies. So I think of MDMA as sort of... It's like adding the anesthesia or adding the secret sauce that allows the therapy to go deeper and to be more efficient and more effective and also more comfortable. It's painful digging up trauma and you can be scared and you can be re-traumatized and you can cry. So to take a chemical that sort of dampens the amygdala response so you're not as fearful and increases serotonin so you're not as anxious and very importantly increases oxytocin. So you feel more trusting and connected and more bonded with the person who's doing the therapy.

So that's an important piece of the puzzle, right? It enhances the therapeutic alliance, that sense that the therapist and client are working together towards something. So that combination, and then also of course, MDMA, methylenedioxymethamphetamine, it's sort of a cousin to methamphetamine or amphetamine so you've got that stimulant base. People are awake, alert, they want to talk, they want to connect, they want to dig and they've got really good recall, not just for the trauma, which is really important, but for the session itself, right? I mean, sometimes you may think you've got these great insights. I think nitrous oxide is a great example. From my experiences with nitrous is I think I've discovered this amazing thing and then I come out in the sand kind of goes through my fingers and I'm like, "I don't know what I had." But with MDMA you really remember the session, you remember the processing of the trauma, and you're also going to remember the trauma a bit differently because while you process the trauma, you are feeling at ease and comfortable and courageous.

So it's a chance to sort of reformulate and reintegrate the trauma and also just have a measure of acceptance and equanimity, like, "Yes, this terrible thing happened to me, but it wasn't my fault. I didn't cause it, but I'm not going to reject it anymore. I'm going to integrate it into the full picture of who I am." So that's a very long answer of saying that I'm unwavering in my belief that MDMA will be really a disruptive technology to the field of psychiatry and potentially even fields outside of psychiatry, because as you and I know the mind and the body, they're very much connected. We often sort of work through traumas with physical symptoms. So yes, it will help post-traumatic stress disorder, but it also, I think anytime you've got very rigid thinking, right? Which you would have say, let's say anorexia, I think is a good example or somebody-

Dave:

I thought you would say politics, but okay. Yeah.

Julie:

Well, we should talk about politics because I agree-

Dave:

God, no.

Julie:

... that that is someplace where there's rigid thinking, but I'm going to stick with real pathology, like obsessive compulsive disorder, anorexia.

Dave:

I used to have OCD by the way. So I get it. Okay.

Julie:

So that you've got a certain way of thinking and a certain way of doing things and it's not going to change very much or anorexia, you're convinced you're fat, even though everyone else is telling you you're too thin or addiction, you keep going for a certain substance because you want a certain feeling and even though you're really not getting what you want, you keep going there over and over. So there's this rigidity of thought. And so what we need in psychiatry is something that sort of creates a more fluid sense of self that isn't so rigid that maybe opens things up. And that's where I think not only MDMA, but now you should talk about psilocybin, LSD, ayahuasca, psychedelics, where you really have sort of an enhanced flexibility, a different way of thinking about things, you have less cognitive rigidity. You're able to sort of like, let's shake it up, let's look at it from a different angle. And or from just a bigger perspective, yeah, what sometimes makes a big difference.

But in terms of politics and cognitive rigidity there, I would say that if you read chapter five of Good Chemistry you will understand more about where oxytocin fits in to this sort of social cohesion that happens around ideas and also that's where I talk-

Dave:

Tell me more about that.

Julie:

Well, there's a couple of things.

Dave:

So how does oxytocin tie into politics?

Julie:

That's an excellent question, Dave. I call it the sort of seamy underbelly of oxytocin or the sort of the dirty underside of it is that, as much as we think of oxytocin as being sort of this cuddle hormone and it makes us feel connected and warm and fuzzy, and we get it from hugging and we get it from cuddling and we get it from orgasm and from nursing a baby and the baby gets it from nursing with the mother. So it's all this great kind of warm, cuddly, rainbows and unicorns connection, but the other side of this is that it also really enhances social cohesion group mind and this idea of are you in my tribe or are you in the other tribe? And us and them sort of thinking. Oxytocin can make us sort of more stringently acting toward the people that we consider to be them and not us, and also feel more cohesion and power within the group. I personally don't think tribalism is such a bad word. I mean-

Dave:

It feels good to be in a tribe. I mean, there's a biohacker tribe.

Julie:

It feels good to be in a tribe. Back when I was in medical school and MDMA was sort of in the clubs and in the dance scene, we would go to raves and a lot of people would be taking MDMA or what they thought was MDMA if they were lucky it was MDMA at a rave and there would be this sort of group mind, like you're on the dance floor and everybody's dancing the same song and everybody's like feeling good and looking around smiling at each other and there's eye contact, maybe you're all sweaty and you're touching, that is a really heady experience and there's a lot of oxytocin going on, even without the MDMA I would say. That group dancing, group cohesion, it's going to facilitate the flow.

One important thing to talk about with hormones and I imagine you've heard this from other interviewers, is that I think we have this idea that if you take a hormone, you act a certain way. If I shoot you up a testosterone, you're going to be horny. And that may be true, but more importantly it's if I see someone who is attractive and arouses me, then I will have an increase of testosterone. So it can come from the stimulus and that you make it yourself. So oxytocin really works more that way. The studies where they give oxytocin and show that it affects behavior, it does a bit, but not nearly as much as something that happens naturally or endogenously like orgasm or childbirth or nursing. I mean, these are very intense states and they're high oxytocin states, but they're sort of in response to a stimulus, like in response to a baby.

Dave:

Okay. I did a little, we'll call it an experiment in crowd control at one of the biohacking conferences that I run. This must have been three or four years ago. I had Paul Zak, Dr. Love, the oxytocin guy. And he had a 92nd video that induces oxytocin in about 90% of people who see it and it's like a real tear-jerker kind of video. So I played it for everyone at the start of the conference to raise group oxytocin. And because I'm high integrity, I told everyone what I was doing, but it didn't matter because the oxytocin would still go up. And it was a really amazing conference because we opened it up with this huge amount of trust and all that stuff. And here's my question for you, Julie, if we'd given them MDMA instead of oxytocin via video, what would the difference have been?

Julie:

Well, the thing about MDMA is it's not just oxytocin, right? You're also getting increased dopamine, increased serotonin. So it's a little bit more than just oxytocin really. I mean-

Dave:

So nicotine, oxytocin, coffee and a little 5-HTP. Could we come close?

Julie:

I mean, the thing that I say a lot about MDMA is that, I feel like you couldn't design a better molecule to assist in the process of psychotherapy. So yeah, it's possible that if you took a little oxytocin and 5-HTP and nicotine and this and that, maybe you would approximate something, but anybody who had had MDMA-

Dave:

It's not the same.

Julie:

... would be like, it's not quite it, like try-

Dave:

Okay. I have never had MDMA surprisingly to some listeners. I mean, I go to Burning Man a lot and all that kind of stuff. The reasons that I'm really concerned about serotonin receptor sensitivity, I think we might've even talked about this a little bit on our last interview. What are the risks of trying this?

Julie:

So the big caveat is that because this is an illegal drug, you don't know what you're buying, you don't know what you're taking and so that's really the biggest harm, right? There's a risk of drug substitution. So one of the things that makes it less risky besides the fact that if it were legal, it would be less risky, right?

Dave:

Yeah, no kidding.

Julie:

But if you know that you have MDMA, that's already a big hurdle in terms of decreasing risk. And then the other big risks are overheating, getting too hot, dancing too much, getting heat stroke. And then the other risk that people don't always talk about is over hydrating, that MDMA does put you in a little bit of a water retention, sort of a state, especially if you're a premenstrual woman. So there's a risk of over hydrating, but in the context of the medical research that's going on now you know you've got either 80 or 120 milligrams. It's like 99.7% pure and you're not dancing around, you're not over hydrating. So a lot of those risks really are minimized in the research setting and this is why these are FDA sanction studies that are... this is a multicenter trial where they're giving MDMA to people with post-traumatic stress disorder in small centers of research all around America.

So you're asking about how to decrease risk and I'm sort of telling you that the medical model that we're using is really low risk, but very hard to decrease risk in a recreational setting. And so you don't always know what you're getting and like any sort of psychotropic or psychedelic, which means mind manifesting. I mean, I have a sort of big umbrella for psychedelic. To me, it's not just mushrooms and acid, I would also include cannabis and MDMA under that because they are mind manifesting. They are mind revealing, they're mind expanding.

Dave:

What about Modafinil?

Julie:

I prescribe Modafinil for my patients. I have a private practice in psychopharmacology and if somebody wants to try Modafinil then I'm like, "Sure, you could try Modafinil." And I give them a prescription and I have to argue with their insurance company, but I can usually get it approved. I just have to say like, "Yeah, they have sleep apnea."

Dave:

Shift worker sleep disorder.

Julie:

"Shift sleep disorder." It's really that people would like an option besides Adderall and Ritalin. People looking to focus. I think Modafinil helps some people focus. Every once in a while I get somebody who likes it more than a regular stimulant, but not that often.

Dave:

Is it mind expanding in the same way you're talking about... I'd put it on the same list because it makes, at least for me, it makes me more able to do more, everything is effortless and including mindfulness, but you could just take that and play ping pong with it, or you could be mindful, but when you're being mindful, you got more mind to be mindful with.

Julie:

Yeah. I mean, to me, when you're really talking about something that's mind expanding it's almost like there needs to be a quieting or a contraction of the ego, and the small self and the self that wants to achieve and do that when you're really expanding, you get out of this sort of yang type behavior and into something more receptive and sort of yin where you don't have boundaries. And the other thing I would mention as long as you're talking about ADD meds and stimulants and Modafinil is I would also make a plug for CBD, which I think it doesn't have the sort of edginess and the pushiness of the stimulants, but it does lend sort of a calm focus. So what I recommend for my patients is that they have whole plant strains that are high in CBD, but do have THC in them. And I do think that it can... I use CBD quite a bit for instance, when I was writing *Moody Bitches*. It really helped me, maybe the way that Modafinil sort of helps you, like get her done.

Dave:

Well, for me, it's usually Bulletproof coffee and nicotine, and I did a little Modafinil, not for my most recent, the book on fasting that's coming out, but the one before that I was writing about Modafinil. I'm like, "Oh yeah, I haven't taken this in a couple of years." I kind of forgot how good it was. So I probably did five of them or something. But for you, it's actually CBD with THC makes you a better writer.

Julie:

Look, it got me to sit down and get my work done.

Dave:

Okay. I hear you.

Julie:

To just sort of quiet. I mean, you know writing, first of all, you have to be alone. It has to be pretty quiet.

Dave:

Yes.

Julie:

You have to be in a particular place and I do. I mean, I can edit in a Chuck E. Cheese, anywhere, it doesn't matter how much noise there is. Although now at Chuck E. Cheese would be like...

Dave:

It's like a Zen temple.

Julie:

It'd be quiet. I'm trying to think of those things that go by and the wind, that tumbleweeds-

Dave:

How they go.

Julie:

... it's just very quiet. But my point is I can focus if I have something on the page to edit or to work with. I can focus in any situation, but for writing and having that blank page need to be in a particular place. And for me, I've found CBD helpful, and my patients they'll use CBD for anxiety or to help them focus. So I recommend it to quite a few of my patients.

Dave:

Wow. Okay. How long does it take you with CBD or any other helpers you use to get into writing mode? I'm asking you as another professional writer.

Julie:

To get into writing mode-

Dave:

Yeah, so if you're going to sit down, there's a blank page. I don't know. It takes me about 45 minutes to get into writing mode and I have my little... I'll do Bulletproof Coffee at night. I'll do decaf because I know the MCTs do something for me. I'll take a little hit of nicotine. I'll take mitochondrial enhancers and things like that. And then all of a sudden I'm like, "All right." And it's about 11 o'clock at night when everyone's quiet and then I just zoom in-

Julie:

You and I are so different.

Dave:

... and then I wake up at 5:00 in the morning and I've written like a whole chapter. But what's your window to get into it and what else do you take? Because I want to know.

Julie:

So I really like cannabis for getting ideas, putting together all the pieces. If I have cannabis in my system, I might take some notes or jot down a couple of sentences or things that I want to work on later, but it's not like I can really write in that place. But I will definitely use cannabis to help sort of inspire me. I was a

cigarette smoker for years, so I am not interested in using nicotine, but I totally understand how that helps you focus. There's no question.

Dave:

Smoking's horrible. I'm just talking about micro dosing oral nicotine, which is anti-Alzheimer's and good for your mitochondria that-

Julie:

And also probably pretty good for focusing and getting work done.

Dave:

Oh, it's crazy.

Julie:

But the other thing is I am not a nighttime worker at all. I am very much a daytime writer and the thing that helps me, my husband built a cabin out in the woods and there's no Wi-Fi.

Dave:

Oh wow.

Julie:

So if I bring my phone, I have Wi-Fi, but if I leave my phone at home and go out with a pen and paper, can you imagine that sometimes I will just like... I need solitude. That's my biggest problem. I'm a psychiatrist so I've got tons of patients who need things from me. I am a wife and mother so I have a certain amount of people who need things from me. And then there's always food shopping and laundry and cooking. It never really ends. My biggest thing is just carving out the space to get some work done and I'm not willing to do it at night. I love sleeping.

Dave:

It's really weird. I'm happy to we're... I didn't think we're going to talk about this and I hope it's helpful for a lot of people listening. I've been a night owl. My average bedtime was 2:00 AM for my entire life. And over the last couple of years, I've been doing more and more research on sleep and also more biohacking and I think actually fixed stuff in my brain that has not been working very well since I was very, very young, but I can go to bed at a normal time, like 10:00, 10:30, which was the most important thing for my whole life. But to write, I still stay up till 4:00 in the morning, but I manipulate my colors and all that kind of stuff with glasses and everything where I can do that for three weeks and it takes me one day to go back to going to bed at 10:00 and I'm highly functional the whole time.

And it's kind of a miracle because for me, just like you constant demands on time when you're a CEO of multiple companies and visible on social media and all, it's a lot. And then kids, wife. All of a sudden, I'm like, I finally got five hours where no one will talk to me and it's like so much peace. And then I want peace and focus and I want to just get it all out. So I'm going to have to try some CBD with a little bit of THC. I've not been a big fan, but I will give it a try and it's legal here in Canada. So that's not an issue for me. The other things I would never do because obviously they're not legal.

Julie:

Right. Well, look I think... One of the things I talk about in Good Chemistry a little bit, and I do in my private practice too, is that everybody has their own sort of proprietary blend of chemistry and what works for them and what feels good to them. And it doesn't really make a lot of sense to try to convince somebody to take this other thing, if they're like, "Yeah, but this works."

Dave:

True that.

Julie:

So I will often... I mean, a harm reduction is all about sort of taking somebody where they are and accepting like, "Okay, I get this works for you and I'm going to work with you, but let's see if we can shift ever so slightly."

Dave:

It's also about you play with it and you realize, "Wait, I've never taken Piracetam and oh my God, I'm better at what I do with this and it's good for my brain. So maybe I'm going to add that." So for me it's about continuous process improvement to just find out how can I be in the state I want whether it's from meditation or electricity or whatever else. And so I'm asking these questions because I believe that many of the people listening to this are also asking themselves that question, like, how can I do more of what's important to me? And what's important is very different for different people listening, but it's like, what are the tools so that I can get there faster or I can do it better because I think that's our core wiring. And that brings me back to that MDMA question at the beginning. What about MDA without the meth molecule on it?

Julie:

So MDA lasts longer than MDMA and it's a bit more psychedelic. But it sort of came before MDMA and there are people who like it better. A lot of people think that it does sort of open the heart in the same way that MDMA seems to open the heart, but there's a little bit more of a psychedelic feel to it and it's a little bit more intense and it lasts longer.

Dave:

Okay. So no therapeutic benefits there compared to MDMA?

Julie:

When you're doing research there's a lot of practical issues to consider, right? Like one of the reasons why there isn't a ton of LSD research going on is that for some people LSD is going to last 12 hours, 14 hours. That's a really long day when you're a therapist, right? Mushrooms are great, because they're really right around like four to six hours and MDMA is pretty much around four to six hours, but we give the research subjects eight hours to really completely have an experience and collect themselves. But if you were using MDA, it would make the day, maybe three or four hours longer and eight hours is already... Yeah, it's already a pretty long day, I think for people. So that's one of the reasons.

But also MDMA, it's a pretty subtle shift, for people who haven't taken a lot of drugs or taken psychedelics maybe they're not even pot smokers or anything, but MDMA is a pretty subtle... It's not so disorienting. If you had to pick up the phone and talk to your mother or whatever you could. You're not so incapacitated the way that you might be with psilocybin or LSD or ayahuasca. So it's a good sort of

manipulatable state. One interesting issue for the sort of sciencey nerds in your audience that I talk about in Good Chemistry. There's a researcher named Gul Dolen who had a paper in nature that was really fascinating where she sort of theorizes that one of the things MDMA does is it puts the brain in this very sort of plastic state, this neuroplastic state that is similar to how neuroplastic our brains were when we were adolescents. Right?

Dave:

Wow.

Julie:

So one of the things that happens in adolescents is that it's a time of sort of integrating a lot of social cues and figuring out what your place is socially. And as an adolescent, we care a lot about social cues, right? You care whether your friends think you're cool or think you're a jerk or rolling their eyes or sparking at you.

Dave:

Totally.

Julie:

And by the way, everybody wearing masks makes you a little uncomfortable because you don't quite know exactly whether somebody's smiling or yawning or grimacing under that mask. So you can get a little anxious. So it's almost as if you were a teenager again, and you really care what people think about you. But in this highly plastic state it's a chance to sort of re-empess and rework some of that circuitry. So I'm very interested in neuro-plasticity. I imagine your listeners are too.

Dave:

It's one of the two big core things, have more energy and be more neuroplastic equals younger brain, right?

Julie:

Yeah. So a lot of these psychedelics really do enhance neuroplasticity.

Dave:

By raising BDNF and neuro pro factor and things like that.

Julie:

And we're measuring BDNF more in a lot of research moving forward because everybody is... I mean, I would just like to say that like 10 years ago I was at a conference on a stage and I said to the entire crowd, BDNF is important. You need to be measuring it. I think neuroplasticity is important. I still really believe this. And ketamine absolutely enhances neuroplasticity and ayahuasca, DMT does also. And the cannabinoids do as well, CBD and THC do enhance neuroplasticity. And so does exercise and so does fasting and so does antidepressants a lot and also stressful events and lots of things. And what it really comes down to is like, where is our brain open to learning? Where do we learn things? How do we learn things?

And one thing that I think is really important too, and I sort of look at the world is like are you in sympathetic? Are you in parasympathetic? And in the very beginning of Good Chemistry, I explained the difference. I'm sure your listeners know all about fight or flight and sympathetic nervous system. We all do. We've all heard about it a million times, but the thing that we really haven't heard enough about and that I am sort of preaching is the parasympathetic nervous system. It's the exact opposite of fight or flight. It's not all about attacking and running away. Sometimes survival is about staying and connecting and collaborating, getting input from people, making good decisions, integrating a lot of information. You need to be open to really learn and integrate and grow and change. You cannot be closed down in fight or flight with a very clear vector that you're either attacking or running away. You really need to be open and parasympathetic. And you know that that's the place... It's really the only time the body repairs itself is in parasympathetic. It's called rest, digest and repair.

Fight or flight is not about the body fixing itself. It's about running on fumes. The parasympathetic is where the body can repair itself and it's also where we can repair our relationships. It's where we can sort of tend and befriend and mend the connections, it's where we can be social. It's also the only place we can really sleep and digest our food. So we're looking at like in fight or flight, you're talking about insomnia and ulcers and obesity, the metabolism is deranged, the immune system is deranged, but in the parasympathetic rest, digest, repair, the immune functioning is better, your metabolism is better, your neuroplasticity is better, your social skills are better. It's where we want to be. It's where you want to be. So I talk to my patients a lot about how do we get in parasympathetic? How do we get you out of fight or flight? Because look at you, you're leaning forward, your hands are clenched, you're angry and we're just talking about something that happened two days ago. Imagine how you felt two days ago. So it's about breathing through your nose and calming yourself.

And oxytocin is sort of the juice that runs parasympathetic as much as cortisol and adrenaline sort of enable the sympathetic state. Oxytocin enables the parasympathetic state.

Dave:

Well, I promised listeners at the beginning of the show that we were going to talk about connection, then we started talking about drugs because you're a really good expert and you're talking about the psychology of not the recreational use, which is an appropriate way to use them so I tend to go there with you. When it comes to connection, I would like to know what you're seeing in the last six months when there's been pandemic and global fear and all that sort of stuff, what has that done to our sense of connection and what is the impact on people then from that.

Julie:

Well, there's a few layers, right? I mean, the most obvious thing is that we're all more isolated. We're all staying away from other people. We're physically distancing or socially distancing. We're wearing masks. Back in March and April, I was talking to some of my patients and one of them said, "I've had no human contact for eight weeks. No one has held me. No one has shook my hand or put their arm on my arm for eight weeks." And I'm thinking, "We're not built for that." We're really not built to be isolated. We're social primates, we're built for connection. It's how we survive. And if you think about sort of back in the cave person days, if the group didn't like you, you were screwed. They wouldn't share their food with you, they wouldn't help you build shelter, you wouldn't create progeny. You were going to get picked off of the herd, you were going to die.

So on some sort of deep level, when we feel that we are not in the group or in the crowd, there is a lot of physical unrest. We're basically in fight or flight when we don't feel like we belong or that we're connected. And so, yes, there's a fear of contagion, but the isolation itself is another stressor. I

think most of us intuitively understand that, that this isolation is another stressor on top of the fear of contagion. The only thing that mitigates it a little bit is that we're all going through it together, right? We're all being traumatized. We're all sort of subject to the same winds of everything. Maybe in some countries it's a little more chaotic than other countries, but at least there is this sense of, "Hey, it's not just happening to me. I'm not just getting screwed here. Everybody is." And misery does love company.

So I do remind my patients who are having a hard time that they're not alone. This is really hard for everybody. It doesn't necessarily make you feel any better just to know that other people are feeling terrible, like you are. But maybe you'll feel a little less lonely that you're not the only person who feels isolated and is going through this, but it's been really hard on my patients and they're soothing themselves however they can, right? They eat more, they're biting their nails, they're gaining weight and definitely had a lot of people who are joking about the COVID-19 is how much weight they've gained or maybe... Yeah. Or maybe they're not as much fun. They're maybe drinking more, the quarantines have sort of taken on a life of their own or people drinking more. And the longer it goes on, I definitely have some people who really are sort of running on empty, running on fumes and really they need social contact. And the Zoom calls are not really working.

Dave:

No.

Julie:

And I explained to my patients, if you're on a call with like seven or eight or 10 faces, your brain is going to be scanning those faces nonstop for social cues to make sure you're safe. That's just the way our brains are. And if somebody has a fuzzy connection or their faces stop for a minute, because they're herky-jerky, our brains are built for, I would say analog signals of social cues. And if everybody's got an ethernet connection, great, but tiny little boxes can't really see their faces, herky-jerky. Your brain is just scanning, scanning the whole time and it takes up a certain amount of bandwidth. It's like an app that's running in the background that's like sucking your battery.

So my patients who are on multiple Skype calls all day long and they don't understand why they feel so fried at the end of the day and I'm like, "Oh, I understand. I will tell you exactly why." Also, you have to get outside, you have to leave your house, you have to walk around like put on a mask and get out there, put on a scuba tank, whatever you need to do, but you can't be a hermit six or seven months. I mean, I really have some people... I had to yell at a patient of mine the other day. I'm like, "Put your phone down and walk outside. Just leave the screens behind." We're so, so attached to our screens. And me as much as... I can't pee without looking at Twitter. I mean, it's just stupid how I'm taking my phone with me wherever I go. When I leave the house, I'm checking to make sure I have my phone.

I wrote about this in Good Chemistry and this, by the way, was written before the pandemic, I should say, so all this advice to like eye contact and inhale each other's pheromones and hug and skin to skin and orgasm, and these things are good for you, but right now you can't necessarily do these things. And it's terrible. And then, the people who are alone are miserable, but the people who are stuck with their families, it's also a bit claustrophobic and it's a different kind of misery.

Dave:

It feels to me like having a sizable bubble is way worth whatever negligible risk that increases because then you can get a hug from a friend and all the other things like that, but it's not something that you hear talked about that much, even from government authorities, knowledge of social distancing, not physical distancing, but social distancing, which is increasing aloneness. And it seems like that would

actually make you sick. Like if you're stressed all the time, because you're lonely, your immunity goes down.

Julie:

Absolutely. Absolutely. You're more likely to feel sick when you're stressed. Yeah. I know families that are sort of bubbling up and I think it works out really well. If you've got two or three families who are agreeing that that's it, it's just going to be us and sometimes they get a teacher to come in or a camp counselor or whatever, or something for the kids. I think people are creating all sorts of new sort of paradigms for how to get through this. But yeah, if you can... I'm a musician, my husband's a musician, we have friends who are musicians. We've been getting together once a week outside distancing to play music together and we all... we're showing up every week on time because we need it and we want it and it is good to have this sort of physical proximity and social support. Without any kind of social support, especially if you're a kid, you really you don't thrive. You don't really prosper.

Dave:

And is there a particular age where it's worse for kids?

Julie:

Well, the Harlow studies with the monkeys and that the monkeys would get their milk from wherever they needed, but then they would go cling to the wire coated monkey that had cloth on it. So babies in particular absolutely need to feel attended to and cared for. I think a lot of what... When people have anxiety now, a lot of times it's because when they were a baby, they did not get held and attended to and cared for in a way that made them feel safe. I worked at Bellevue for a long time. I ran the psychiatric ER at Bellevue on the weekends and almost every patient I saw there who was depressed and suicidal and addicted and homeless. Like all of these people, they all had a history of childhood neglect or childhood sexual abuse or both. And I would think often to myself, like what this person really needs is a childhood transplant. We're not going to be able to fix all these things because they started with such a bad foundation. It's like rearranging deck chairs on the Titanic.

And so that's what I really like about psychedelic assisted psychotherapy is that it gives people a chance to really process and rework some of that very early trauma and maybe create a little bit of a different foundation because obviously you can't do a childhood transplant, but childhood trauma is fueling a lot of the pathology that we see today.

Dave:

Do you think that with the help of psychedelics and the various types of family therapies you can reinvision your childhood and all things like that? Can't you get at least most of the childhood transplant with the right stack of pharmaceuticals and therapies?

Julie:

You can get a few things. I think one thing that you could get is some insight into what's going on, which can already be really helpful that you can... One of the examples I give is like, if you're playing a video game and you're sort of caught in the circle and you're going in circles, but you don't really know that until you get the macro, you get the whole lay of the land and then you're like, "Shit, there's this whole playing field, but I've been over in this corner, duh." So I think that psychedelics can pull out and give you the macro and then you're like, "Oh my gosh, I've just been going in circles. If I just go over here,

there's all this space." So I think that it can give you insight that you can... For some people it's the first time they realized that they were sexually abused or physically abused.

So that is incredibly helpful just to be like, "Oh wow. I've been spending 30 years trying not to think about this terrible thing that happened. Now, I'm going to actually accept that this thing happened and explore it. And now my God, now I have so much more energy because I'm not doing this all day psychically every day or that I was using alcohol to do this, or I was taking pills to do this. And so now I'm just going to be like, oh, let's just let this thing out and try to work with it and I've freed up a lot of energy." But you deal with people I think sometimes in the neurofeedback clinics who are hyper... What's the word? Like hyper competent, they're really good at their job. Maybe they're CEOs or this and that. They're still productive, right? They're producing.

And again, I want to use this word yang, that sometimes they're... It's almost addictive in and of itself that you're pursuing... That there's ambition and there's goal directed behavior and if I make manager, if I make this and then I'll be vice-president and then I can... And there's this sort of drive it's very unsettled.

Dave:

Can you define yin and yang for listeners?

Julie:

Sure.

Dave:

I mean, certainly I know what you're talking about, but I think some people here may not be familiar with those two halves. Just educate us all.

Julie:

First of all, I think it's nice to say yang or yin instead of masculine or feminine, because there are women who are very yang. I mean, I'm very yang.

Dave:

Yeah, you are.

Julie:

I've written three books, I've edited two books. I like ran the psychia with a whip and I was not like a pink frilly dress kind of girl. But I think it helps to think in terms of... So yin sort of would be the more feminine energy and yang will be the more masculine energy, except it's not really about-

Dave:

Pushing versus receiving?

Julie:

Right. So yin is a... Sorry. The way I think of yang that really works for me is that it is a penetrative energy, is cutting through something. There is a vector and I think of missiles, guns. These are yang instruments of sort of projectiles, right? And then there's... the yin is the receiver, the cup, the bowl.

And so if I am in a yin frame of mind, I'm taking in information, I'm integrating information. I'm not just immediately acting. And that's what I'm talking about some of these like hyper achievers, they're addicted to achievement, they're addicted to work. There are process addictions. We can get addicted to drugs or alcohol or... I'm sorry, alcohol and other drugs, so let's say... But you can also get addicted to people and you can get addicted to processes. You can become addicted to watching great British baking show or listening to podcasts or being a CEO, but there is still a level of compulsion and you know this isn't good for you, but you're still doing it. And I think of that as very sort of yang behavior, and there's a certain rigidity and fixed quality to it.

And yin is much more flexible, the opposite of cognitive rigidity and open. And again, I would say the parasympathetic and being open as opposed to being sort of closed minded and fixed, which is more sympathetic in fight or flight.

Dave:

You said something that was really important in there. You said that you, as a woman who is stereotypically be more yin, but that you have a lot of yang energy, and likewise men can have lots of yin energy.

Julie:

Yes.

Dave:

So it isn't masculine and feminine. And I've found that training my ability to switch between those states is really important because I don't know how to put together all this stuff I put together to do my writing and my research and my discovery, that the creative side of what I do, unless I'm in yin state, but then if you want to be a CEO and get shit done, you kind of have to put on the yang hat. Is there a psychedelic or therapeutic technique that helps people sense when they're in one versus the other and learn how to be in the state they do?

Julie:

Yeah. Well, I teach my patients to just pay attention to your breathing first of all, because when you're in fight or flight, you are either not breathing or you're breathing in a pretty shallow way. When you're relaxed, you're taking these long, slow, deep breaths in and out through your nose and breathing through your nose can help to put you yin and parasympathetic. And huffing and puffing, panting is more of a sympathetic thing that would put you in yang. So breathing exercises are the easiest way. One of the things that really helped me sort of figure it out was that I have friends with babies and I would hold their babies. The thing about if a baby's crying, if you calm yourself before you pick up a crying baby and you're calm, it calms them, right? So I learned how... And I sort of pretend like oxytocin, oxytocin and it's just kind of like running down from my brain through my body and I relax myself and I'm breathing through my nose and then I hold the baby and I get more oxytocin.

And so I've sort of figured out how to flip my brain into baby mode and really calm myself. But the first thing is just understanding it. Or if you're talking to your wife, let's say, and you're talking and you're talking, but you're talking about the same thing and you start to get a little louder. You're not hearing me a little louder, a little clencher, your voice is going up, your voice gets a little tighter, your hands get a little tighter, your heart starts to race a little bit. You're getting into sympathetic mode, right? Your social skills are going to suck. You're not going to be able to take in information. You got to

get out of sympathetic and into parasympathetic, if you really want to have a conversation and a collaboration with your partner.

But it's funny because if you're having a conversation with somebody and they say to you, breathe, relax. Does anyone ever relax in that situation?

Dave:

No.

Julie:

What's more aggravating than being told that you're not relaxed and you need to relax. So that backfires. But yes just breathing in and out through your nose. Some people say in through your nose, out through your mouth, I am not one of those people. In and out through your nose. And if you're really freaking out, I tell people that if you just block the right nostril and breathe in and out through the left nostril, it really can calm you down. It can sooth you and it can help to get you over in parasympathetic. Everybody should just start paying attention because you can tell when you're in sympathetic and when you're in parasympathetic, you can feel it. And if you can't feel it, you need to pay attention.

The first chapter of Good Chemistry I just tell people get in your body become embodied, feel your body. And you have to put the phone down or close the laptop to really get embodied and be in your body. And so maybe you have to really get off your screens to feel whether you're in sympathetic or parasympathetic. But if I start reading too much of the news, I can feel myself shifting, good morning, I'm calm, I'm reading this and that and then as I'm getting more news I feel like my heart rate's going up and my breathing is getting a little uneven and my hands are getting a little sweaty and clenchy and I'm starting to get angry and this is bad for my body. The news is bad for me physically. I have to stop.

Dave:

It's so cool that you talked about that. I have a new book called Fast This Way, that's coming out and by the way, guys you're listening to this, if you haven't pre-ordered it, would you do me the favor of pre-ordering it? And while you're at it, if you order Good Chemistry at the same time, they'll show up together on Amazon everyone can get them both because it's actually a really good read you should read, Good Chemistry. But in Fast This Way, I talk about fasting from the news.

Julie:

Yes. I totally agree.

Dave:

And it's a type of fasting. It's not just about, I didn't eat anything because you'll be tweaking if you do too much of that. So go a day without it and see how your life changes, right?

Julie:

Yes, absolutely. Yeah. Fast from the news, fast from your devices if you can. I've got a really good friend, who's not Jewish, but he observes the Sabbath and that he shuts down his phone and his laptop for 24 hours, Friday night to Saturday night, no big deal. Saturday has become this like spacious, sacred, long day with so many hours in it because he's not spending any time on Twitter or Facebook or email. And that's just once a week.

Dave:

Let's talk about macro-dosing versus micro-dosing because so many people reaching out to me asking about that and they're fundamentally different. So I want you to explain the differences, but especially focus on the differences around the therapeutic benefits.

Julie:

So a microdose is basically one 10th of a macro-dose. So let's say if you had dried mushrooms, you would maybe take three grams or four grams, or if you're feeling quite heroic, you might take five grams. But a macro-dose is basically a 10th say of the three grams. So it'd be like 300 milligrams or even 200 milligrams. The point is with micro-dosing is that it's supposed to be sub-threshold, sub-perceptual. So you're not supposed to feel like you're tripping. The joke that I make is if the words on the page are swimming, then it's not a microdose, right? So the words have to not move. So you figure out what your dose is, whether it's 100 milligrams or 200 milligrams where you don't feel it, but it is in your system. And then for LSD, like a sort of classic LSD dose would be maybe 100 micrograms. So a microdose would be 10. So a microdose is about a 10th of a macro-dose.

And there's a couple of different protocols. You can either take it every three or four days, or there's some protocols where you take it five days on two days off. The reason why you wait and take it every three or four days so that you don't become tolerant to it. So people are micro-dosing for all kinds of reasons. Initially I think some people were looking at it for focus and productivity and it seemed like it was very helpful for that and then other people were looking at it for creativity, where you can get a little bit looser and make sort of looser associations, which is associated with enhanced creativity. Again, this idea of rigidity versus fluidity and opening things up a little bit. So it could be used for depression or anxiety or ADD. I mean, everybody seems to have a reason why micro-dosing is helpful. And then the other issue is that it's also, these are anti-inflammatory right? Psilocybin, LSD. I mean, DOI, we know for sure is sort of the most anti-inflammatory psychedelic.

Dave:

DOI?

Julie:

Just if you look at all the psychedelics and how anti-inflammatory they are for whatever reason, it seems like DOI is at the top of list-

Dave:

What is DOI?

Julie:

... for how anti-inflammatory it is. It's just one of many psychedelics that hits the 5-HT_{2A} receptor, the serotonin 2A receptor. It's not commonly used.

Dave:

Okay, got it.

Julie:

It's just if you look... I mean, the person who's done the most work in this issue of psychedelics being anti-inflammatory is Charles Nichols, who is Dave Nichols' son. Dave Nichols wrote a chapter in the first book that I edited, which is the Ecstasy book, Dave Nichols wrote the chapter on the chemistry of MDMA. So Dave's son is sort of carrying on his father's footsteps. I mean, Charles has done a lot of research on psychedelics as his father Dave has. So he is the person who sort of, I think, made popular this idea that there are certain psychedelics that are anti-inflammatory, but I feel like I've gone off on a tangent.

Micro-dosing. Okay. So there is a man named James Fadiman, Jim Fadiman and the Fadiman protocol is that you microdose every three or four days. And so some people are using micro-dosing, whether it's LSD or psilocybin or dried mushrooms, but they're using micro-dosing as a way to get off their antidepressants or as a way to treat depression or as I said, ADHD or PTSD. It seems to be sort of good for what ails you. If you don't have a history of bipolar disorder, if you don't have a history of schizophrenia, if you don't have close family with those disorders... And by the way, this is assuming you're not adopted because if you're adopted, then you need to know what your biological history is.

Dave:

Right.

Julie:

But this is not legal. There's very little research. It's mostly anecdotal, but it's a lot of anecdotal data.

Dave:

Okay. Well, that's oftentimes where breakthroughs and new discoveries happen because it's kind of weird if you only do stuff that's been studied, you wouldn't study anything new, but...

Julie:

You have to start somewhere. Right? And so usually what happens is once there's enough anecdotal data, then somebody says, "Hey, we should really do a placebo controlled study." And so that is what's happening now is that people are starting to organize a placebo controlled micro-dosing studies to figure out what it's doing. So these are early days. Again, this is potentially a disruptive technology, a disruptive way of treating things. In psychiatry, we have the daily dose, you take your antidepressant or your anti-anxiety medicine every single day for years. And the truth is that these medicines weren't really designed to be used for decades and they weren't really studied to be taken for decades, but that's what's happened. Ever since Prozac was developed, I think in '88 and since like the mid to late eighties, people have been taking more and more antidepressants, anti-anxiety meds, sleeping pills. The numbers are just going up and up. 9/11 was a huge increase. It seemed like a lot of people gave themselves permission to start taking things like Xanax or Ambien or Klonopin at that time.

So we had the mid-nineties where they all of a sudden started to do direct to consumer advertising. So that was a big jump. And then 9/11 was another huge jump. And then I would say now that COVID is going to be another big jump. In March or April, I had pharmacies saying that they were running out of Xanax or Klonopin. They couldn't get my patients... "Oh, we don't have any one milligram, can you prescribe two milligram and break them in half?" The Xanax was flying off the shelves.

Dave:

Wow.

Julie:

So I think that we are definitely seeing an uptick in how people are soothing themselves, but on the flip side is that we are seeing an uptick in people trying different ways of treating their unrest and whether they're using macro-doses or micro-doses, or they're maybe finding an ayahuasca circle to go to. There are all kinds of options more than ever before. And eventually those options are going to work their way into mainstream psychiatry, mainstream medicine, because these work better. They're more effective and they're more efficient.

Dave:

I love that. And I have one final question for you, Julie, and you just wrote Good Chemistry, which means you immersed yourself in thousands of hours of writing plus you took all of your clinical background and experience and you condensed it as much as you could. So your brain is in a unique state to answer the question. And right now, given what we all know is going on in the world, if you could recommend only three things for a person to gain more sense of connection in their life right now, what are the top three?

Julie:

Anything that enhances oxytocin, hugging, eye contact, orgasm is lovely. So anything that would increase oxytocin I'd say is number one. And I actually going to put cannabis as number two, because I am a big proponent. I know, I know I'm going out on a limb here. For me, cannabis really helps me get in my body and become embodied and become very aware of sort of where I am in physical space and my kinesthetic awareness and my posture and things like that. But it also really helps me feel connected to nature. When I go outside if I have had cannabis, I feel just sort of more in tune with nature and more a part of nature. And I don't know what I would put as number three. The thing about cannabis is like, you pretty much know what pot looks like. There's not a lot of rampant drug substitution. There's not a lot of counterfeit cannabis going around. A lot of people live in places where they can go to a dispensary and get cannabis.

You can't really say that for MDMA. I think MDMA really enhances connection, but I can't tell people go out there and get MDMA because Lord knows what they're going to get and it could really be dangerous. So that's why I'm having a little bit of trouble what to put at number three, but I guess I would say to put yourself in the parasympathetic mode, because you're not open to connection if you're in fight or flight, you are closed down in fight or flight. The example I like to give is if you have a fire in your kitchen, you are totally focused on like where's the fire extinguisher, get out of here I got to put this fire away. You don't pick up the phone to chat with somebody, you're not nice to your neighbor, you're not sweet with your kid. You've got something to do and you're very closed in on that one thing and your social skills, I would say when you're in fight or flight are shit. So you want to be in parasympathetic so that you are open to connection or it's not going to happen.

Dave:

Beautiful. Well, Julie, thank you for being back on Bulletproof Radio. I think it might've been too long. We always have these amazing conversations. I feel like we could go for another hour and talk about cool stuff, but we're at the end of the show, I would like to just first say, thank you and then I'm going to talk to our listeners about what they need to do next. So thanks.

Julie:

Thank you for having me.

Dave:

What I want you guys to do next is seriously listen to that last, maybe one minute of the show about the top three things you can do to be more connected because now it matters. It is a performance enhancing substance. I'm talking about connection and you ought to read Good Chemistry because you're interested enough in this to subscribe to Bulletproof Radio, you spend a couple hours a week with me usually and if you were to take some of your time and you were to listen to the audio version, or just read the book, you're going to figure out some things that are happening in your life right now, post pandemic, even though the book was written pre-pandemic, because it's all about connection. And I am seeing everywhere that the sense of connection that people are starting to lose because you can't make full face contact with people because you're alone. It's starting to create a societal burden and I think there's wisdom in Good Chemistry that you really want to take advantage of.

So check out the new book. It's worth your time. Otherwise, well, we wouldn't be talking about it. Hope you enjoyed this episode. And as always, if you read Good Chemistry, you have a moral obligation to leave a review when you're done reading it and if you don't leave a review for an author after you've enjoyed their book, it's because you're a bad. See you next time.