

Transcript Unwinding Anxiety with Jud Brewer

Jud Brewer: [00:00:00]

with worry, if we don't pay attention to the negative results of worrying. We're never going to become disenchanted with it. We're just going to keep doing it habitually and we're going to build it every time we worry.

Diana Hill: We are four clinical psychologists here to bring you cutting edge and science-based ideas from psychology to help you flourish in your relationships, work and health.

Debbie Sorensen: I'm Dr. Debbie Sorensen, practicing in mile high Denver, Colorado, and coauthor of ACT Daily Journal.

Diana Hill: I'm Dr. Diana Hill coauthor with Debbie on ACT Daily Journal and practicing in seaside, Santa Barbara, California.

Yael Schonbrun: From coast to coast, am Dr. Yael Schonbrun, a Boston based clinical psychologist and assistant professor at Brown university.

Jill Stoddard: And from sunny San Diego, I'm Dr. Jill Stoddard author of Be Mighty and The Big Book of ACT Metaphors.

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Diana Hill: Thank you for listening to Psychologists Off the Clock!

We're so happy to be partnered with Praxis, continuing education here at psychologists off the clock, they offer continuing education for promoting lasting change with evidence-based training. And they're the premier provider in continuing education for clinical professionals. Some of their ongoing on demand. Anytime classes include act immersion with Steve Hayes act in practice, and also the DNA VI model, which is with Louis Hayes who works with adolescents and is fantastic.

Debbie Sorensen: yes, and we have big news. We Diana and Debbie here are offering a Praxis training. It's a two hour workshop on Wednesday, April 28th. And the time is. Four to six Pacific and you can sign up best of all, it's free and anyone can join. It's not limited to therapists. And what we're going to do is talk about some of the concepts from our book that we have coming out in may and offer you some practices that you can use from acceptance and commitment therapy to thrive in your [00:02:00] own life.

So we're really excited to be offering that. You should check it out and we hope you can join us.

Diana Hill: So go to our website off the clock. psych.com to get a promotion code on live events through practice.

Diana: This is Diana. And here I am with Debbie and we have a great episode for you today with neuroscientist Jed Brewer. It's a second time on the show. We wanted to have him back because we love him so much the first time. And today he talks all about anxiety and Debbie and I wanted to talk a little bit about anxiety ourselves in terms of how we approach anxiety from an act perspective in our practice. So I'm curious, Debbie, what was your reaction to the episode and your thoughts on it?

Debbie: Well, I love the episode. He's just such a great balance. He's so interesting and just presents these concepts in such an understandable way, but he really has the science down and he does great research. And to hear him talk about anxiety, I can't wait to start sharing this episode with so many people. Really good. One

Diana: When I was reading his book, I [00:03:00] was looking at it through the act lens, which is sort of how I look through most things these days acceptance commitment, therapy lens. And what I really noticed was his model, how much it maps. On to acts approach to anxiety in terms of both acceptance and allowing, but also this concept of exposure and exposure has been around for many, many years as a really effective treatment for anxiety. One of the most effective treatments for anxiety, but act takes a little bit of a different approach to exposure. And I thought we could talk a little bit about that today because might be helpful for our listeners.

Debbie: Yeah, I think that, and these are very effective behavioral approaches to anxiety. And I think one of the main distinctions is when you're doing exposure, what are you exposing the person to? And what are you really trying to help with? And from the act model, it's all about exposure to the feelings of anxiety, the sensations, the anxiety itself, or whatever the sensation might be, because I think.

What I often hear from my clients is the sense of. [00:04:00] I'm here because I have anxiety and I hate feeling anxious and it's really terrible. And it's panic is a great example of this because most of us have had panicky sensations at time, panic attacks come up, or, you know, at least I'd experienced this.

Panic, but what happens sometimes is that people start to think, Oh no, that's terrible. You know, we really catastrophize it. And people get into these patterns of avoidance around anxiety. And so when you're doing exposure work, what you're really trying to teach people is that they can feel those sensations, those feelings have those thoughts, but it's it's okay.

So the exposure is you do all these different things to expose people to their fear, but it's for the sake of being exposed to the anxiety.

Diana: Yeah, I think the other thing that's really unique about act and exposure is the why behind the exposure. So traditionally, when you think about exposure, if you read about it, like in psych one Oh one or psych textbook, you think about, uh, the person that was afraid of spiders. And first the therapist shows him the picture of a spider and then eventually they take them to [00:05:00] those yuzu and they see a spider and then maybe someday they'll touch a spider.

Right. But yeah. In act, it's all about why would you even need to touch a spider in the first place? How is not touching spiders, interfering with your life? And if it's not interfering with our life, we don't really need to do exposure around it. But really life is exposure. If you're living a values rich life.

So when you start moving towards your values, you're likely to come across difficult thoughts and feelings and sensations, and in the service of making that move towards your values. It may benefit you to be able to open and allow them to be there and to get comfortable with them. It doesn't mean they go away and actually the research on acceptance and exposure shows that it doesn't necessarily impact the intensity of the feelings that you may have, but what it impacts is your ability to be with and be present when those difficult feelings show up.

And when you think about that in the real world, which is what Debbie and I are. Interested in. That's what we wrote a book on that's coming out May 1st act daily journal. Yay. Check it out.

Debbie: act in your daily life. That's what we're into.

[00:06:00] **Diana:** Yeah. act daily journal You can think about. Okay. What does exposure look like in a relationship? I don't know if you have a good example, Debbie, that you could share of act in your daily life.

Debbie: Well, actually, so I have one, it's not relationship, but that came to mind from a client I worked with this was years ago, who, so this is such a, just a day-to-day example. He was avoiding his mail pile. I have a mail pile too, but mine's more just not getting around to, to. Sorting through it, but for this client, there was a fear, right?

A fear of like, what if I open it? And it's a bill I can't afford to pay what if I'm getting sued or a notice of some kind nine. And so the, there was like this avoidance and procrastination, but we kept talking about in session. And so here's just an example of some real life exposures. I said, okay, you're coming in next week.

Grab that pile of mail, throw it in a grocery bag and bring it. And we just sat there in the session and, you know, I check in like, what are you notice? Like you're about to open this envelope from the insurance company. Like what do you

[00:07:00] feel and what thoughts are coming to mind? And. It was two, two pronged approach here.

One was just getting this task done that had been avoided for months, but the other piece of it was around like feeling the anxiety and the hope is that eventually, you know, the client will do it without me sitting there kind of, you know, coaching and cheerleading and checking in and kind of making them do it really.

Um, but, but actually just the doing of it itself, the anxiety showed up. And so we could have something to work with right there in the session.

Diana: Yeah. And I imagine there was something in that mail that probably was important to him. To look at at some point that, you know, if you don't look at your mail, you're gonna, it's going to cause bigger problems in your life than the original anxiety about the mail. Yeah.

Debbie: Well, and even just in the avoidance, it turned into this big thing. I mean, it kept coming up again and again, in session, this point it was like, stressing him out, you know?

Diana: So I have an example, a real life example of a client. This is back in the day who had panic attacks while he was driving on the freeway and. [00:08:00] True confession. I have a mild anxiety of merging onto the freeway as well ever since driving school, it's been like, uh, okay, I can do this. And I live in a small town, so I don't have to do it that often. Right. I could avoid it. But here I had this client that we decided to do in vivo exposure to his panic while driving. And what in vivo means is just exactly what you did, Debbie. We do it together. And so I got in the car with this guy and here I am. Practicing act on myself, my own exposure. Well, how I'm practicing with him because it's a little anxiety provoking to be in the car with somebody who's anxious about driving.

And it was really wonderful because I was able to in the service of my values of being an effective exposure, Therapist was able to open up and allow my own discomfort with it and then coach him in doing it as well. So those are some examples of exposure. And I think that when you start to look at Jud Brewer's habit loop and how he's bringing curiosity and acceptance and kindness into that anxiety habit instead of [00:09:00] avoidance and shutting down, you'll see how that concept of exposure maps on.

I think you'll like this episode. Great,

Debbie: Yes. Thanks for having him back on.

So super excited to have Dr. Jed brewer on the show again. And we had him back in October talking about both cravings, as well as habit loops and anxiety loops. And he's out with a new book, unwinding anxiety, which takes. Years and years of his work and puts it into a really tangible hands-on solution for anxiety.

Diana Hill: And it's not what you expect because it's actually quite simple. Although these strategies may be challenging to do, they are simple and practical. I want to just read Dr. Brewer's, bio it's short and sweet. He's an internationally renowned addiction, psychiatrist and neuroscientist. And he's the director of research and innovation at the mindfulness center and associate professor in psychiatry at the school of [00:10:00] medicine at Brown university, as well as the executive medical director of behavioral health at Sharecare. So it's great to have you on again, Dr. Jud. It's good to see you.

Jud Brewer: Thanks for having me. It's great to be here.

Diana Hill: And I'm excited to take our conversation to the next level. And for those that didn't listen to that first interview, I highly recommend going back cause we actually talked a lot about anxiety. Understandably. It was October during the pandemic. How could we not talk about it? But you do a really great job about laying some of the foundations around your model with anxiety there. But let's launch in two. I actually think one of the most interesting parts of your book, was your dedication, which was to the Amazon addict. And we don't learn until the end, why you dedicated it to that person, but can we start there? Why did you dedicate this book to the Amazon addict? And what does that

Jud Brewer: sure. So I will satisfy anybody's deprivation curiosity, so they don't have to flip to the end of the book to the acknowledgements to read exactly what happened. So my first book, the craving mind. It [00:11:00] was, you know, a lot about the neuroscience of how mindfulness works and how we can learn to let go. And I use this metaphor of a compass where, you know, if we don't know how to read a compass, we might actually be moving in the wrong direction. We might think South is North. And I think a lot of habits are formed that way, where we think that excitement or pleasure or things like that, our happiness yet when we don't look at those carefully. We might not, we might miss the North star where we were running away from. What is actually a greater happiness. And so that's, that's a lot of what that book was about. And I gave people this map and compass analogy, and I just, I, now I see naively assumed that people would be able to follow that and, and, you know, use the map and compass themselves. But what are the compass at least themselves. But what I realized afterwards was, and this was really a kick in the pants by Amazon addict who gave me a review relatively early. It was a three-star review. She said lots of nice things. And I know [00:12:00] it's a sheet cause I stalked her on Amazon to try to figure out. Oh, it looks like who is this who also reviewed laundry detergent, like a day later or something like that. So, um, Amazon addict said, you know, he seems like a nice guy and you know, the neuroscience and I even took a neuroscience class or something.

So she was, you know, Yelp reviewing my neuroscience research, I guess. And, um, and then she said, but why doesn't he give people, tell people what to actually do? And I was thinking at the time, my ego, but I told I give them the map or the compass, the compass, and I realized. That, you know, this was five years later or something like this.

It finally dawned on me that I hadn't actually given people a clear enough map. I'd maybe given people a compass, but if somebody isn't experienced in navigating the world, say, you know, with only a compass than, than the maps really helpful in. And it really took several more years of work in my clinic in particular.

To really see them [00:13:00] that there is a map that can be drawn. That's actually relatively simple, as you say. And so this, this book, unwinding anxiety is really about that map piece, giving people this step-by-step instructions that I've not only found really helpful in my clinic, but also in my lab. I don't, I don't write about anything that I can't back up with really strong evidence.

So it took several years for my lab to do a lot of the research. Around, you know, this, this process of how anxiety can actually be driven habitually, which seems counterintuitive. But I think we covered a little bit on your last, on our last interview as well.

Diana Hill: So we can think Amazon addicts for giving you a three-star review. It's the first time I'm sure. Ever Dr. Jud, that you've ever gotten a three-star review or. What's sort of the equivalent of a C in the world. Right. And interesting. I was, when I was reading that I was thinking, Oh, what was his habit loop there in terms of going into achievement too?

And actually, yeah, ego achievement. I got to fix this thing and well, we get to benefit from it. So that's that's all [00:14:00] right.

Jud Brewer: So can I dedicate this podcast to Amazon addict? Whoever you are.

Diana Hill: yes, absolutely. You can dedicate it to her. Um, yeah. so let's, let's map it out a little bit because you set up this model that's, , used throughout the book and it's repeated, you're a good teacher and that we, you repeat it in many different ways. So by the end of the book, you've had lots of repetition and we know that's important for learning, but tell us the model and give us some examples.

Jud Brewer: so the model you can think of it as three steps, or I grew up riding a BMX bike and ma and then eventually a mountain bike. So I think of it as three gears, because if we're in a, on a bicycle or in a car, You know, you need first gear to get going, and then you shift into second, third gear, safe. You're in a car, you know, on the highway.

First gear doesn't work so well, but third gear does. So if folks liked that analogy, I'll use that. Uh, and you can think of it as if you're not. If you don't know how your

mind works, you can't work with it. That's the basic premise. And [00:15:00] a lot of, you know, a lot of this really came from my own experience, falling on my face.

When I started as a psychiatrist. Some fundamental aspects of how anxiety works. I would just trained in medical school and residency to prescribe medications. And that's what I did. So the first step or the first gear is really just simply mapping out our mind, seeing how anxiety can be driven by mental behaviors, such as worry.

The second step or the second gear is tapping into our brain's reward system. You know, the strongest part of our brain, the part that lays down habits in the first place, instead of fighting against those actually harnessing them so that we can use that to itself become, you know, let's say disenchanted with worry and so that we're less excited to do it.

And that actually sets up. Third gear. We can shift into third gear where we can step out of the habit loop itself using, you know, typically I like the [00:16:00] super power of curiosity, but I think of, you know, the two main buckets are like curiosity and kindness, and we can talk about why intrinsic rewards may be more sustainable than extrinsic rewards, or somebody says, Oh, well, maybe I'll just binge on Netflix to not be anxious.

Well, you know, try bingeing your entire life. See if that works, you know, that type of thing.

Diana Hill: so let's start with that first gear. And when I was reading the first gear, it kind of hearkened me back to my first year of graduate study, my PhD program. The first big book they gave us was this book called don't shoot the dog by Karen Pryor. I actually went back and looked at it because my memory of it was that it was a dog training book and I was thinking no way, would they give us a dog training book, but now there's a new version out that says with clicker training. So I know it is a dog training book that they gave us as first-year graduate students, probably to get our egos in check. But these really basic behavioral principles that were sort of baked in for me, I was in a CBT based program to understand human behavior. And it's sure. It's not that [00:17:00] simple, but there is a reward based learning that is involved in the development of something like an anxiety disorder or just our generalized anxiety that, that we have as a culture.

So can you talk a little bit about that first gear and reward based learning?

Jud Brewer: I'd be happy to so reward based learning or reinforcement learning as you've probably learned it as well is based on three elements, a trigger, a behavior and a reward or result. Cause often some of these things aren't that rewarding right now. And you can, you know, the simplest way to think of this is it helped us survive.

It helped us find and remember where food is. And it also helped us remember where danger was. So we could go back to the food and we could avoid the

danger, right. Positive and negative reinforcement with anxiety. It's really interesting. So, as I mentioned, I, I struggled treating my patients with anxiety. Uh, and what I learned in medical school, you know, give them some medication. Well, just as an indication of how well the gold standard medications work, there's this [00:18:00] number called number needed to treat. Basically, it means that how many people you need to treat before one person shows significant reduction like a remission in symptoms and for the gold standard treatments, uh, for gold center medications, that number is 5.15.

Okay. So I was, you know, of every five patients that came into my clinic and I gave an SSRI or, you know, some type of an antidepressant to, which is the gold center for anxiety about one of them would show a significant reduction in symptoms. Well, that's not very rewarding for me. So I had some negative reinforcement going on in clinic and was using, you know, it was like, well, you know, I'm struggling as a clinician.

And at the time I was studying habits, which we've talked about before and I had this aha moment. Oh, Can we actually approach anxiety as a habit. And that came through me going back and looking at the literature from the 1980s. So back in the eighties, you know, this is when the stones were singing, what is it? Mother's little helper. You know, she goes running to the shelter of her [00:19:00] mother's little helper that was benzodiazepines. That's how commonly they were used. You know, the stones were singing about them possibly. Yes. So the, you know, in the eighties, that's when the SSRI Prozac was first, uh, You know, discovered, let's say or manufactured.

And everybody was thinking, Oh, SSRI, is there going to be this miracle pill? And yet they were ignoring this work of this guy, Thomas Birkbeck, uh, who is a psychologist researcher at Penn state and what he suggested. Was that worry as a mental behavior could drive anxiety, habit leaves. And that was, that was a big aha for me.

I never ever thought about that before. I was just thinking, well, you're anxious, here's a pill. You're anxious, here's a pill, you know? So it really helped me wake up to seeing how anxiety can be negatively reinforced. And if you think of worry, The way he described it and others, I think subsequently was that anxiety or fear or some negative emotion triggers worry as a [00:20:00] mental behavior and that worry results in one of two things.

And there could possibly be others as well. But the two that they described where a one is a feeling of control, and two is one of distracting oneself from the more negative emotion. Of anxiety itself. Okay. So it might seem like, well, worry, really controlled because worrying, it really just makes our thinking part of the brain go offline.

So, so you're thinking, why would worry be helpful? Well, it might. Feel helpful because at least we're doing something, you know, think of the parent with the teenager who goes off, you know, on Friday night to party with friends and the parent is staying up all night, worrying about the kid until they hear the door knob open, and then they can finally go to sleep.

I'm going to venture to guess that they're worrying did not keep their teenagers safe, just going out on a limb here. Okay. So, so that worrying, well, at least I, I can't go in, you [00:21:00] know, shadow my kid at the party cause that's not going to work so well, but I can't worry. So it can feel like, well, at least I'm doing something so that mental behavior, even though it's not rewarding.

And in fact, when our brains realize that worry is actually pretty, it doesn't feel very good and can feed back into anxiety. So that we go over this, you know, this event, horizon of a black hole of anxiety and worry can, in some ways feel like, you know, we're doing something or controlling ourselves, or at least avoiding that negative emotion.

So that's, that's the, you know, basic reinforcement learning process around, around anxiety. And there are different flavors like procrastination and other things like that, but that's the general, uh, the general framework.

Diana Hill: Great. I love how you're digging up some, psychology here. And I want to go a little further with that because you're talking about this basic behavioral model that showed up in the eighties around. This is why they were giving me the don't shoot, the dog book. ACU shows app.

You do a behavior. And then based on what the [00:22:00] result is, determines whether or not you do that, that behavior again, and with something like worry, you're talking about a negative reinforcement. If you're distracting yourself from the cue of anxious feelings or positive reinforcement, if you feel like you're doing something about it. And one of the things that they also taught a lot in the eighties with behavioral psychology is self-monitoring and that became really big around that time. People started working out, like started start recording, self-monitoring keeping diaries of food or, and actually a little tidbit.

My master's research was in self-monitoring and I compared a self monitoring food intake versus appetite. The signals. Cause I was really interested in interoceptive awareness at that time, in terms of working with women, with eating disorders or at risk for each disorders and what you self-monitor matters. So if you monitor how much, what you're eating throughout the day, you're going to get more obsessive about food, which is something we don't really want people that are at risk for Edina disorder to do. But if you self monitor your appetite, you'll be more. Tuned into your hunger and fullness, which is [00:23:00] helpful, right?

If you want to recover or prevent an eating disorder, and what you're doing in your book is you're doing this practice of self-monitoring because you have us check in over and over again with our habit loops and the anxiety habit loops. So can you talk about what you're having people pay attention to?

If they're not paying attention, if they're not worrying, they're paying attention to some other things and this first gear, uh, part of the program.

Jud Brewer: Yeah. So maybe I can, I'll give a clinical example, maybe of somebody worrying and then we can talk about, you know, other ways to how that can help with the self monitoring and other things to pay attention to, or the paying attention itself might be that new habit. So I wrote about this in my book,

because as a patient who I've been treating for a couple of years now, and when he first was referred to me, he, I, you know, just the chief complaint was anxiety. And when he walked in the door, Check. He looks pretty anxious, you know, so when I took his history, he's the first thing you [00:24:00] described was that when he would be driving on the highway, he felt like he was in a speeding bullet. And this was so distressing to me to start to get panic attacks. And it was so distressing.

He started avoiding driving on that highway. And as you know, panic disorder comes, when you start panicking about, about getting future panic attacks or you start. Worrying that you might be worried, you know, that type of thing. So he had, he had not only had these full blown panic attacks, but he had completely avoided driving altogether.

So the first thing we did was that I pulled out a piece of paper and just wrote down trigger behavior result and on the paper. And I said, okay, let's map this out together. What's your trigger? And it was thoughts like, you know, these, these distressing thoughts, the behavior. At this point was avoiding driving on the highway, you know, even driving the local roads to get to my office.

He was anxious. And then the result was that he felt, you know, he didn't have these panic attacks. He could avoid having those, but it was obviously causing him distress. [00:25:00] So, what I had him do was I sent him home. I sent him home with our own lending anxiety app, and I said, just map out your habit loops, okay.

Around anxiety. So this gentlemen, he not only had panic disorder, but he had full blown, generalized anxiety disorder. So that's an example of mapping out and being, being able to become aware of some of these old habit loops that haven't been that helpful.

Diana Hill: Great. So you said you were going to take that to the next

Jud Brewer: yes. So it's probably makes sense then to talk about the second stepper or second gear at this point. And then I can use him as an example there as well. So typically, you know, this, I, I love this old skit from Bob Newhart that somebody had sent to me recently. And it's basically this he's a comedian from the seventies, any of this.

You know, this woman walks into a therapist office and she says, you know, I have this fear of being buried alive in a box. And he basically, your long story short, he says, you know, his therapy was just stop it. [00:26:00] You know, he'd just sit there. And in a stern, a male probably condescending patronizing voice, just stop it, you know?

And that was, that was the gist of that skip. But what that highlights is how I think. A lot of us just wish we could tell ourselves not to be anxious or we could tell ourselves, you know, not to whatever. And this, this heuristic goes back to the ancient Greece. And probably before that, where there's this relief on the Parthenon of this writer and a horse.

And the idea is that the writer is reason and the horses are passions. And so you can think of that horses as worry and anxiety. And we just think, well, if I could just. Hold on long enough, I could just tame this thing, then I can win well for anybody. That's tried to just tell themselves to stop it when they're anxious. It doesn't work often. It backfires because we think, Oh man, I see this doesn't work. I can't tame my own anxious, worry thoughts or whatever. So. In [00:27:00] fact, when you look, you know, fast forward to modern day, when we've looked to see what part of the brain is involved in cognitive control, that's the prefrontal cortex, the weakest part of the brain, the youngest from an evolutionary perspective.

So step two or second gear is about letting go of that notion of trying to force ourselves to just stop it and really. You know, seeing that the horse itself has a lot to teach us. Can we actually tap into that process and the way that works long, long story short is there were two researchers in 1970 named Russ Scarlet and Wagner.

And what they postulated was that we set. Up habits, you know, for a reason they help us survive. We don't have to remember to relearn everything every day. And yet we set up the habit of worrying, for example, in the same way that we set up the habit of seeing the cake, you know, tastes good as compared, you know, so when, when we're a kid and we are presented with cake versus broccoli, you know, we're going to pick cake.

Cause, cause our brain says, Oh, [00:28:00] you know, associates with birthday parties and ice cream and friends and presence and all those things. So it's, it's got this reward value. And cake is going to keep having that reward value until we see that it's not that helpful. It's not the cake ever loses a soror value, but it could be that if we three pieces of cake, it's not as rewarding as when we could eat cake for breakfast, lunch, and dinner, when we were a kid and didn't have any effects on it.

So with worry, if we don't pay attention to the negative results of worrying. We're never going to become disenchanted with it. We're just going to keep doing it habitually and we're going to build it every time we worry. So the way that this rescore lead magnet Wagner model works is basically there's this thing called either a positive or a negative prediction error.

So if we do a behavior and it, the result of that behavior is the exact same reward as it was previously. Or we don't even pay attention to the reward. We're just going to keep doing it habitually. But if we pay attention and it's more or rewarding, or like, Ooh, that [00:29:00] was really, you know, cake tasted really good.

That's a positive prediction in our brain says I wasn't expecting it to be that good. It was better than expected. So I'm going to go back to that bakery or whatever. If we eat the cake and there's a bunch of salt, you know, they, they miss baked it and put a bunch of salt instead of sugar. We get this negative prediction error that says I'm not going back there.

They screwed that one up. We can do the same thing with worry. We can ask ourselves, what am I getting from this? When we're worrying? And we can, it's

pretty clear when we really feel into our embodied experience, not thinking like, Oh, maybe I'll win, I'll solve the problem this time. But when we really feel into our experience in that moment, we see that worrying doesn't feel very good.

So we get that negative prediction error, and we need to do that pretty regularly.

Or I should say we have to do that enough. So that, that prediction error

decreases just to give you, so I'll give you an example of that and then I'll, I'll

pause. Cause I've been going on and on. The, so my patient who came in and I told him to start mapping out his habit loops, I forgot to mention that [00:30:00] he also was 180 pounds overweight.

So this gentleman had hypertension. So he had high blood pressure. He had a fatty liver, he had obstructive sleep apnea, all of this relating to his obesity. And he's, he came in for his followup visit two weeks later. And I said, you know, so how's it going? And the first thing he said to me was, Oh, I lost 14 pounds.

And I looked at him thinking, I don't think we even talked about weight loss yet, but did I forget something? And, and he said, no, no, no, no. I was mapping out my habit loops like you suggested. And I realized that I was stressed eating and as a result of, or in response to my anxiety. So that was my behavior.

And I realized that it wasn't actually helping my anxiety and it was actually making me feel worse about myself because I knew I needed to lose weight I've of problems. So he'd lost 14 pounds. He went on to lose over a hundred pounds, simply mapping out these habit loops and seeing that the stress eating wasn't helping him.

He applied the same practice to his worrying as well. [00:31:00] So he'd been worrying for about 30 years and you started getting anxious around the age of eight and, you know, found that the worrying and constantly being on guard was, was a result of, you know, his dad used to basically intermittently slap him, so this kid had, I had learned to be on guard because he didn't know when his dad was going to slap him. And so he was constantly vigilant, constantly anxious for the next 30 years. And so he could start to map out that vigilance, that fear, that worry, Oh no, something's going to happen and see that he wasn't actually in danger and start to become disenchanted with the worry itself so that he could start to unwind that as well.

So that's really the second step or second gear is helping ourselves see very, very clearly how unrewarding this old habit of worry or anxiety is

Diana Hill: the nature of avoidance is that it prevents a new learning from occurring. So maybe when he was a child going into his head and doing some kind of. [00:32:00] Mental worrying or, you know, being somewhere other than where he was or eating, that was, that was, you know, way he coped. But later on in his life, it's not working for him anymore.

And, uh, my advisor, Linda Craig had used to always talk about paying attention to the point of diminishing returns.

Jud Brewer: Hmm.

Diana Hill: Like where, where along this line, is it no longer working for you and you have to stay conscious to find that point, because is it like halfway into the chocolate cake or is it three quarters when it stops tasting so good as opposed to I'm either all or nothing with it.

And. It just makes me think about this second part of, you know, worry is one behavior, but all the different clusters of avoidance behaviors that are associated with reinforcing anxiety and how, uh, exposure treatment is the treatment of choice. You know, if someone was coming in that had an anxiety disorder, I've worked with a lot of different ones and how you, you actually have to go into the, The feared sensations to learn that you're actually will be okay. There's a way in which you're doing that with, , the [00:33:00] second part where you're starting to notice the point of diminishing return turns to the point where it's no longer reinforcing, but also this third component, the third gear where you're creating a new loop. A new habit loop for people to turn to.

So can you talk a bit about that?

Jud Brewer: yeah, I'd be happy to. So once our brains start to see how unrewarding these old behaviors are, and I like that term, the diminishing returns, because it reminds me of some of the ancient Buddhist teachings where, you know, the Pali Canon the canonical teachings of the Buddha. There's basically this line that says it wasn't until I explored gratification to its end.

That knowledge and vision arose. And so this guy was talking about, you know, becoming enlightened from seeing how unrewarding his old habitual behaviors were of basically, you know, taking things personally is one way to think about it. So I, I love that, you know, only then only when we see that pleasure plateau and only through awareness.

Can we see it? [00:34:00] Can we move on, right? It's not that KC is bad or chocolate's bad, or anything's bad out too much of a good thing can really be too much of a good thing. And sometimes worry itself may never be a good thing. There's really no evidence supporting that. And we can, we can talk about that later, if you want to talk about performance anxiety.

Cause I think that's an interesting, uh, myth as well or legend even. So step three or third gear is about stepping out that habit loop. Once we see that there's. Less there's diminished return when we're worrying or no return when we're worrying, our brain says, okay, I get it. Give me something better.

Otherwise it'll just slip back into its old habit. So here I think of it as the BBO, the bigger better offer, can we tap into a bigger, better offer? And there are a lot of distraction strategies that are out there that can be, that can fit that third gear definition. So, you know, In modern day, we've got these weapons of mass distraction as Cornell West, put it or [00:35:00] phones, right?

So we, if we're, if we're frustrated or anxious, we can go on the phone and find something to distract ourselves, which is challenging because then we don't learn how to. Have distressed tolerance, you know, because anytime there's something frustrating, we just distract ourselves. Whether it's cute pictures of puppies on Instagram or whatever.

So that's one way to do it, but these tend to be external and we become habituated to them. So there are only so many cute pictures of puppies that we can look at before our brain says, I get it, you know, give me something else. So what can we do? And what can we do that doesn't rely on something external? Well, it turns out. That curiosity as an intrinsically rewarding mental behavior is something that we all have and something that may not become habituated. It's just something that we, we tend not to use so much as adults, because for whatever reason, we're trying to control [00:36:00] the world and think that we know everything or whatever it is, we do, you know, children model curiosity beautifully, and it's actually contagious when you watch them be curious and, and you're not on a deadline and trying to get to the next thing, if we just give people the space to be curious.

So you think of. And my lab actually did a study recently where we queried several hundred people and asked them to rate 14 different mental States in terms of which ones were more rewarding and uniformly people reported, anxiety, frustration, disconnection, things like that. As less rewarding. Then things like connection, kindness and curiosity.

Okay. So we can think of anything that, uh, helps us step out of the habit loop as third gear, but ideally something that's not going to create its own habit. You know, where we have to drink alcohol. A lot of my patients, um, have turned to alcohol as a way to cope with their anxiety, which obviously has led them to see me for.

Alcohol use disorder, you know, not so [00:37:00] helpful. So I think of, you know, general flavors of kindness and curiosity as being really ideal, third gear, bigger, better offers. Not only have we shown in anybody, if they only look at their own experience, we'll see. Yeah. I'd rather, you know, curiosity feels better than anxiety.

Um, but my lab has shown that as well. And it's something that we can all tap into. We don't have to go to the store to buy curiosity. It's simply a matter of tapping into it and then reinforcing it. Through just seeing how helpful it is in Ohio. Yeah, go

Diana Hill: that look like in a more concrete way? Like how would someone start to work with curiosity when they feel anxious?

Jud Brewer: So do you want to geek out a tiny bit? Cause I think that, I think this is interesting, but you tell me if it's not and we can move on. There's actually some research from the university of Toronto at w from maybe five, 10 years ago where they actually looked at. Uh, the eyes. So you're, I'm sure you're familiar with like somatic memory where we tend to hold [00:38:00] physical postures that are assisting associated with mental feelings like emotions.

So for example, people tend to have their shoulders clenched when they're stressed out or their jaw Clint's when they're stressed out as compared to when they're relaxed. So that's an example of sematic holding something in somatic memory. So if I, if I do this where I, I tightened up my shoulder

Diana Hill: both doing it right now. You should everyone try it. Tighten your shoulders. What does that feel like?

Jud Brewer: Right. Does that make you feel more relaxed? Oh, I feel so relaxed now. Versus if we take a deep breath and just relax our shoulders, that's what we associate with relaxation. Is you kind of the loosening? Well, it turns out that our eyes. May do the same thing. They may hold somatic memory, and this may even have an evolutionarily adaptive function.

So this group in Toronto had people, well, let's do another, let's do another experiment. So if you open your eyes really wide and try to get angry. Oh, I'm so angry. Does it work?

[00:39:00] **Diana Hill:** besides both of us looking ridiculous, but , no, it's hard to do that. Yeah.

Jud Brewer: When we're angry, we're very focused. We're intent because we're, we've already got an action plan as it I'm going to go get that person, or I'm angry about something.

I want something to change, so we don't need to gather more information. So our eyes tend to be narrowed because they're not taking in information. They're, they're focused, they're moving, you know, and it drives us to action. So now narrow your eyes and try to get really curious. Oh, I'm so curious. Doesn't work does it now, because when we're curious, we're taking in information.

So the reason I went through all of that is not only is there, it's pretty interesting from an evolutionary perspective. And I think Darwin even suggested this. I wrote a little bit about that in my book where, you know, the eyes, if you open your eyes, you're actually taking in more information. So this can happen both with fear.

That's why our fear response is deer in headlights, but it can also happen with curiosity. Oh. And because [00:40:00] it can get laid down in somatic memory. That are, you know, when we're frustrated, our eyes are narrowed. When we're curious, our eyes are wide. If we're frustrated or anxious, we can just drop into our experience and check our eyes.

And we can open our eyes really wide as a sematic way to pop us into more of a state of being curious.

Diana Hill: Dr. Rick Hanson, when we had him on and he writes about this, a neuro Dharma. talks about the eyes as well. And he talks about the eyes in terms of looking at the horizon versus looking at things close up and how it activates different parts of our brain. We're looking at the horizon.

We have parts of our brain that are more, uh, thinking about things sort of as a whole and more or less egocentric. And when we look at things close up, it gets us into more of a. Uh, egocentric state. So for like squinting and looking at things

close up, we're in trouble. So we need big, big guys looking at things on the horizon.

And that it's what you're talking about. There is sort of the, that the pathway can go both ways, right? So our body is sending signals [00:41:00] to our brain and our brain can send signals to our body and that we can, you know, that's one way to practice curiosity just in the physical. More from a physical, um, stance as well. I like that. That's cool. I teach yoga. So I'm always interested in the, in the body side of things. Uh, what else, what would be another example that would be maybe not with, uh, uh, you know, using our body to change our body to experience curiosity would be another example we could try.

Jud Brewer: I think so when I write about this a little bit, where we, I led a seven day silent meditation retreat with the women's us Olympic water polo team. And so I'm sitting there thinking, what the heck am I supposed to teach these people? The, you know, they, they were coming off of back-to-back gold medals at the last two Olympics and they, and when they came on retreat, they'd just won the Pan-Am games and the world championships.

So they're doing all right. So we, but they had never really spent a week in silence and especially away from their technology. So it was [00:42:00] really interesting to have them start to explore what it was like to be with themselves. And that can be. That can be a challenge even for world-class athletes. So I'm about day three or four of this retreat.

This was, I was teaching this with a friend, a psychologist, Dr. Robin, Robin Baudette. And we were in Colorado at this kind of in this Valley. And we hiked up this Ridge one day to where we could see this great view where you know, this big Vista, we thought it was a great idea at that point to break silence and, uh, just to have them.

Learn, what is a simple mantra to help us be curious, something that we all actually have intrinsically. And so on the count of three, we just went one, two, three, and then she and I went. Hm Hmm. We had learned this years ago or realize this years ago that when we're curious about something, there's this, there can be this natural inclination to go.

Hmm. You know, I don't know. Hmm. [00:43:00] What is that like? Hmm. Do my eyes really get neuro when I'm frustrated, you know? Hmm. And in fact, I found that, uh, I think in France, they have a slightly different it's like all or some, some slightly different, uh, enunciation of that same thing, but the idea is everywhere that I've gone.

Yeah. And explored this, we all have some guttural sense. Of what, what we do when we're curious. And so I liked that as a way to kickstart the curiosity because it's, it's really, it pulls us out of our head thinking, Oh, I need to be curious, which doesn't work into. Hmm. What's it feel like even if we're not curious.

Hmm. What's it feel like not to be curious right now. So it pops us into curiosity in that moment and practically applying that to anxiety. One thing I like to do is have people just drop into their experience and ask themselves Hmm. Where do I feel? Anxiety the [00:44:00] most right now, not just assume this is where it is.

And this is what it always feels like, but where do I feel it right now? And then to add to that and ask themselves, do I feel it more on the right side or the left side of it? My body. So they can go, is it more on the right side or the left side doesn't matter, right? It doesn't matter what side or if it's exactly in the middle. But that can kickstart the curiosity as well.

Diana Hill: Yeah. Yeah. We've become really disciplined. In a lot of ways as a culture. And so you're, you're training some embodiment there and a non-attached embodiment. And I like, um, I like going to the level of sensation because in the same way that you could touch your toes and notice where there's tightness in the backs of your hamstrings and.

Not resistant, but just get curious about it. It would, you know, you'd change your relationship with the tightness. You're also having tightness somewhere else in your body when you're experiencing anxiety. So it's, it's doing that same thing. Just, it's just a sensation in your body as opposed to, I need to get rid of [00:45:00] this right now.

And so I imagine those athletes appreciated that because probably so much of their higher level performance has to do with the psychological component, you know, at a certain level, you. You've got the, the speed or the skill and it's the psychological component that makes a difference in terms of performance. Which I want to loop back to performance and anxiety because you brought that up and this, um, I will say that one of the things about doing this podcast is it's a continuing education for me. I should be getting so many credits for this. Uh, and I think for all of our listeners, because we, uh, early on in our training, we get a certain train and then, you know, it doesn't always get updated.

One of the things he wrote about in unwinding anxiety was this, this old inverted U that I, I think every therapist is taught this around performance and anxiety, and that there's a point where, you know, anxiety improves your performance and then it declines after a certain levels.

Can you, can you debunk that for us? Because I love that part of the book.

Jud Brewer: Sure. And I'll have [00:46:00] to say, I think we were all primed for this when we learned the story of Goldilocks as a kid. So it was just, you know, perfect heuristic for us to think. Yes, anxiety is helpful so that we can kind of hold onto it instead of asking ourselves, how is this really help? Huh? Is this really helpful for me?

Right. So this goes back to the night. There was a study in 1908 by these two researchers, uh, names, Yorks, and Dodson, and some might say, Hmm, does the name sound familiar? Isn't there a law about these guys? The

Diana Hill: a psych one Oh one it's coming back to mind here. Yes.

Jud Brewer: In fact, there is a York's Dodson law, and it turns out that that became a law because another famous psychologist in the 1950s gave a talk.

He gave a lecture where he speculated without evidence that an so let me back up. The York's Dodson study was about Japanese dancing mice. And they found that if they shocked Japanese dancing mice, that if they [00:47:00] sock them a little bit, they, you know, like they couldn't get them up there off their butts to run through the maze.

If they shock them a moderate amount, they did it. And if they shocked them a lot, you know, they didn't perform as well either. So here's this inverted U shape curve. That. And they talked about arousal. So if you make these rats, you know, are the Japanese dancing mice more aroused? They'll run through the maze faster.

Okay. Uh, Hans Elliot comes in in the fifties and he speculates that anxiety might do the same thing. Again, no evidence for this gives us lecture goes on. At this point, the York Stotts in paper had only been cited about four times. So people had largely ignored this. One of Sally's graduate students. Two years later, published a paper where he.

Took rats. And he held their head under water as the stressor. And he found that if he held their heads under water too long, then they performed less well than if he held them under the water less long. And I don't know if, if you should give them [00:48:00] extra time to catch their breath before they start swimming or whatever, but that was his experiment.

And interchangeably, he used the words, anxiety, and arousal, and he said, this, this proved the yurts Dodson law that, you know, uh, you need, you need, uh, the right amount of anxiety to perform well. So he, he psychologized this, this experiment, you know, in psychologize is this performance anxiety into existence. So again, your paper, I think by 1990, 90 had only been cited about 10 times.

Okay. But something happened, uh, in the two thousands early two thousands and maybe helped by the internet, uh, by the time by 2010, that paper had been cited a hundred times. No, sorry. I think it was by 2000, had been cited a hundred times.

And by 2010 it had been cited over a thousand times. So there was this exponential growth in people citing this York's Dodson law saying [00:49:00] that, Oh, you know, performance anxiety is helpful. And sometimes around, I think around 2015, somebody wrote this great review article. I forget the guy's name, but the title was something like from loss of folklore, where he really went through all the history here around this Eurex Dodson, you know, think coming into his guest existence.

And he highlighted something really important, which is only 4% of papers supported. And inverted you say curve and 10 times that many over 40% of papers showed a very clear negative relationship. So inverse relationship, more anxiety, no matter what, the more anxiety there is, the worst we do. So from a scientific perspective, there's no evidence for it from a heuristic perspective. It sounds good until you really know you think about it. So talk about Olympic athletes. If you look at Olympic athletes, The ones that crush it, the ones that beat everybody else, you know, cause everybody's got this high level of physical ability. It's really [00:50:00] about that mental game that wins the game, right?

And the folks that win the gold, they are in flow. They are folks that are just crushing it because they are not anxious. Remember anxiety makes the thinking and planning part of our brains go offline. So if we think performance, anxiety helps us with a meeting or a speech or something like that. Well, I like to use my thinking and planning part of the brain when I'm in meetings.

Right. And so it doesn't make sense that having that not available, it's going to help you is this could just be this true, true and unrelated where there's a correlation, but no causal connection. And I'm that's my guess is that what's happening here is that people have falsely associated. Causation and thanks to the internet, blowing it up saying, Oh, this is your ex Dodson law and people not going back and looking at the history of what's actually true and the science behind it and their own experience, then they just hold it up as a badge. And they're like, yep. Performance, anxiety. It's important for me to be anxious so I can perform well.

[00:51:00] **Diana Hill:** Yeah, I've heard you say, uh, sort of sciences, the new religion and how you're in this example. I think that you're really turning to the science and that's what I think for a lot of people with this year has been about like, how do we. We're all anxious. Okay. What can, where can I, what can I trust? Okay. I can kind of trust science if I actually, you know, unpack science, the true science that's there.

And I think one of your gifts is that you use science for the buy-in for folks, but it doesn't stop there because you also have. This, uh, more experiential personal history with a long-term meditation practice and, you know, the Buddhist principles that you've been embodying for a lot of years. And one of the things that you talk a lot about in the book, which was got me excited into the bit of a page Turner, when you start reading it, because you get personal.

And do you talk about your own personal experience with anxiety as a medical student and everything, even just your wife's [00:52:00] experience and it's, uh, it's much more personal than your first book, I would say. And in a different way, I mean, you talk about your personal spiritual practice and your first book, but this one is more about like actually Dr.

Jedd struggles too. So can you, can you share a little bit about your own anxiety?

Jud Brewer: Oh, did I forget to mention that I had panic attacks during residency?

Diana Hill: And some major GI issues, which was a little TMI, but that's okay. I'll keep, keep reading.

Jud Brewer: Yeah, yeah, you can. You're going to focus on the, the panic part. Uh, the, yeah, so I used to get panic attacks during residency, and in fact, I probably had close to a panic attack relatively recently when I was, I was, I've been serving for a couple of years and I'm not, you know, when I get caught in

the middle of a set and get crushed by wave upon wave upon wave, that can be kind of anxiety provoking when I'm not sure if I'm going to survive.

So, so. In residency, I've been meditating about 10 years. By the time I had made it into residency and I [00:53:00] would remember waking up from dead sleep and just having a full-blown panic attack. And of course, being a resident psychiatrist, I then go down the DSM checklist and go check, check, check, check, check.

I just had a panic attack yet at that time I was. You know, full on in my own mindfulness practice. And one thing I'd been practicing was this noting practice where I would just note physical sensations, note, thoughts, note, emotions. And so I could actually almost automatically habitually kick in and start noting.

Oh, thank you. You know, feeling like I'm going to die. Oh, shortness of breath. Oh, racing heart. Oh, tunnel vision. And then see those as thoughts, emotions, and sensations, and not get caught up in them. So I could go, Oh, there's that it's compared to. Oh no. And what that really helped with was one, I would just fall back asleep probably cause I was sleep deprived.

So I'm not going to give credit to my practice, like for making things perfect. But it helped me not start to worry that I was going to have [00:54:00] more panic attacks because I could see these as, you know, sensations that came and went.

So that was my own experience. And I have to say, certainly science is helpful.

You know, we've done studies. Plenty of studies with our, you know, with this unwinding anxiety, I've where we've gotten huge effects, you know, like with anxious physicians, even with people with generalized anxiety disorder. And just to give you a sense of the magnitude with our most recent study, we had a 67% reduction in clinically validated anxiety scores in people with generalized anxiety disorder and the number needed to treat.

There was 1.6. So here helping people see how their own minds worked. Help them work with anxiety. Whereas if you remember it, number needed to refer medications is 5.15. So here's the psychiatrist who prescribed medication suggesting. Yeah. Maybe there are there ways to more accurately and better target anxiety than medications.

Not that medications don't work for anybody. I'm just saying. And, um, there may be another way that we could even pair with medications, but here. I [00:55:00] had to see it for myself, that this could actually work, you know, full blown panic is when, you know, I love the definition of wildly unthinking behavior. You know, when, when that anxiety is leading to wild, Dan thinking behavior, prefrontal cortex is completely offline.

If mindfulness could help with this in my N of one experiment, it was worth studying myself, you know, and doing these, these studies and what I would say for anybody. Is certainly the research can be helpful. You know, the science, it can help give us some blind faith to try something, but ultimately it comes back to our own experience.

We have to be able to try these things out and experience them for ourselves.

And that that's honestly, that's why I wrote that book was for Amazon addict and

anybody else who wanted these step-by-step. Instructions to actually go out and try this stuff. And like you said, at the beginning, it is simple.

Our brains learn a lot of things in a very simple way, and we can use those same ways to unlearn them. Not necessarily, always easy, but it is simple. And that's, that's the guide [00:56:00] that I was hoping to lay out.

Diana Hill: Yeah. So what you're referring to in terms of that big reduction in anxiety with GAD, and, you've also seen big improvements with smoking with your smoking app and eating changes with your, uh, eating app. But I've been trying out the anxiety app. And it's so funny because when you, when you start it, when you start the program, so this is unwinding anxiety and, uh, full disclosure we're affiliates with your app.

Because last time we met, I was so taken by your program. I was like, Oh, we should ask you if we can be affiliates. And with the unwinding anxiety app, you start it. And. About, I don't know if it's like a minute and a half in, when you're doing the intro. I was there about to put my finger on skip the intro and you pop on and say, if you're about to skip the intro you're so on top of it.

Uh, so you break it down into these little tiny. Snippets like three minutes, we've all got three minutes that you can like little bite sized pieces to start to work some of these skills into your [00:57:00] daily life. And it's through repetition and practice and doing it in the real world and small little bits and pieces.

It's not just, you know, reading a whole book and then you're done. It's the, it's the practice of it that, that will change your brain. And then eventually, you know, also change your behavior. And change your anxiety habit loop. So I, I, I will endorse the app that it's very clever. It's engaging. It's fun. And it's useful.

So, uh, do you wanna say anything more about it and how you developed it and what people could expect with it?

Jud Brewer: I will, I'll say a little bit, uh, the sorry, as I mentioned, you know, we've done several. Research studies showing that it actually works, but rewinding there w I developed it largely because we had had some good success with our eat right now, app for helping people not overeat and stress eat and whatnot.

There was a study at UCF showing 40% reduction in craving related, eating with that up. And somebody from that program said to me, you know, Oh, I'm noticing that anxiety is a big driver for eating for me, just like my patient and said, can you develop a program [00:58:00] for anxiety? And that's when I, I said, well, I'm a psychiatrist, but I mostly just.

Prescribed medications. And that's when I started looking at the literature to see, you know, was there an overlap between what we knew, worked for helping people with smoking and eating with anxiety, and then, you know, that that light bulb moment happens. So it develops kind of out of a need. Uh, both in terms of my own needs, where I'd like to have a better hit rate than 20% with my medications.

And also my, my patients and the folks using our programs, asking for something saying, Hey, you know, this could be helpful. So we put it together. You know, as you had mentioned short bite-size pieces, there are 30 core modules. And then there are a theme weeks after that, that people can dive more deeply into topics. For example, a gears theme week, we have two weeks of curiosity, cause there's so much to explore curiosity. There's a loving kindness theme. Wait, because a lot of people have self judgemental habit loops that are echo habit loops on top of anxiety. Oh, why am I anxious? Oh, um, you know, I can't do this. I can't work with this where we can bring in things like loving [00:59:00] kindness to, to help people, you know, unwind those habit lives.

So, and we also have an online community, which I really enjoy every week. Anybody using any of the apps can join me at noon Eastern time for an hour where we actually have a live group and they can ask questions and we'd go into. You know, the topics that we explore with people that helps them, you know, work that way.

You can think of it as a flipped classroom model, where we're delivering the, uh, the didactics at home, through an app, and then they're doing their homework kind of in class on those, on those days. So that's kind of what the app is about. And, you know, I love it because it's, I don't want to just do research in an ivory tower and not have it help people as a clinician.

I want to see this stuff actually get out there.

Diana Hill: there's something about accessibility and availability there. So one of, sort of my values mission. For myself and my own practice is to make sure that I'm making a lot of stuff, low cost and [01:00:00] free and available to people so that you don't have to have X hundred dollars an hour to go see Dr. Jed to get the good treatment that you can see Dr.

Dad, cause he's in your pocket. And that many people can see him. Uh, you know, I think that it's, , it's bigger than just like, than just the, this is really good stuff. I hope a lot of people get it, but this is really good stuff. Some people won't be able to get this because they don't have the resources.

And that's where I feel like apps and programs like, like yours is, are a really excellent way of getting more people to have access to good treatment and to science back treatment.

Jud Brewer: I'm glad you say that, because I think there's a, you know, there's a lot of evidence coming out about how there's a, you know, we really have, um, Disproportionate access to healthcare. And so one thing that we're committed to, uh, is to, you know, anybody that can't, you know, we make these apps like about the cost of a copay.

I think I don't, I don't administer all that stuff, but [01:01:00] also anybody that's in financial need. Um, they can, you know, they can just say, Hey, I've got financial hardship and they can basically apply for a waiver and they'll get it for free. So yes, for anybody that wants to try this out, you know, it's about the cost of a copay and you can use it all the time.

And our hope is to make this, these things accessible to anybody that need them regardless of cost.

Diana Hill: Yeah. So we're going to have to see you in different languages. You'll have to start working on that because that's the other thing about accessibility is everything is so English dominant, but,

Jud Brewer: We do have Spanish actually in all of our apps already.

Diana Hill: Okay. So there you go.

Jud Brewer: Yeah. And we're working on other languages, but certainly we wanted to do Spanish early.

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Diana Hill: psych.com discount codes for Dr. Jed brewer, Dr. Rick Hanson your parenting mojo.

Diana Hill: It's [01:02:00] was interesting because I was reading your book and. You write in it, how anxiety has art was already on the rise before the pandemic hit. And, um, I actually, I follow the APA stress in America surveys that come out. And you wrote about some of your book. And I was just looking at the, the newest one from 2021 coming out in January, which reported that, uh, our stress and anxiety is at the highest level since the start of the pandemic. So even though. The election is over. Vaccine is on the way people are chronically stressed and anxious.

And so it's good timing to have some, some resources. I'm curious. Uh, what are your, your hopes for sort of the next steps in terms of, um, helping people and how you see yourself as, as is doing that?

Jud Brewer: Serendipitous finding from a recent research study. That I think is very interesting that I think it's going to help us kind of move this into personalized training. So there's this, you know, [01:03:00] this idea of personalized medicine, if we could tailor medications to people's genomes and to their epigenetics and all this, they would do a better job, which would be great because you can't just like hit the whole serotonin system and think it's going to work for everybody, you know?

So. We can do the same thing with, with psychological measures. And we, in one of our studies, we had taken, you know, basically four measures where we were asking about anxiety and worry and basically interoceptive awareness and mindfulness. And we found that there were three that people clustered into one and three categories.

We just call them a, B and C. It doesn't matter. And we found that cluster a and C did extremely well. With our own winning anxiety up in cluster B didn't do as well. You know, overall on average, we had 67% reduction. If you just, I don't know what it would be. If you just looked at AMC, it would be a lot higher because. Group B weighed these folks down. So this is about 30% of folks. And what we can do now is start to delve into [01:04:00] this psychological phenotype and say, okay, what is it about AMC that do really well? And especially what is it about B that struggles so that we can personalize that training? And make sure that they can access their themselves because really, you know, we all have awareness. We all have physical sensations. We all have thoughts. We all have emotions. So what is it about B are they avoiding, you know, is there experiential avoidance? Is there, you know, what is that, that we can then tailor to make that aspect of the program even better for them? So what I'm really excited about is really looking at how can we personalize.

Training through simple psychological profiles. We don't even need, you know, we've done work with FMI where we could predict brain reactivity to smoking cues, for example, and predict who would do better in treatment there, but that's expensive and requires, you know, all this stuff here. It's just a three minute survey of 19 questions that, um, that can be delivered and use to start personalizing.

So that's one thing that we're starting to do that we're really [01:05:00] excited about.

Diana Hill: that's exciting. So personalizing your training and then also helping people personalize it for themselves. So that they get curious about their own inner process and then their own they're like, you're your own little inner scientist, which is kind of fun.

Jud Brewer: Yes. It's fine. To end up. Those are the best data. Yes.

Diana Hill: yes. Yeah. Yeah. It sounds like you've been an N of one for yourself for many years.

I have

to it's. Never ending. Uh, well, thank you. I look forward to your next book on personalized, uh, habit loops or whatever it is, but it's just a real treat to have you on it's it's always a pleasure. I just joined enjoy being in your presence. And I hope that people will check out all your books, the craving mind, unwinding anxiety, check out your apps.

If you go to our website, you'll get a link for a discount code to try out some of those apps and, um, many. Uh, well wishes to you, Dr. Dad.

Jud Brewer: thank you. Likewise.

Diana Hill: Thank you for listening to psychologist off the clock. If you enjoy our [01:06:00] podcast, you can help us out by leaving a review or contributing on Patreon.

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