

# How to use breathing to manage panic attacks

**Guest: Dr Brad Lichtenstein** 

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## [00:00:10] Alex Howard

Welcome everyone to this interview where I'm really happy to be talking with Dr Brad Lichtenstein. And we're going to be talking about working with the breath, with anxiety and panic attacks. One of the impacts of trauma can be that our nervous system becomes routinely dysregulated and that means that we can easily find ourselves tipping into these much higher states of anxiety which can also result in panic attacks.

And in this interview, we're going to be exploring some of what's happening underneath that and we're going to explore some practical ways of working with the breath, both as a daily habit, but also what to do if you find yourself in those particularly challenging moments of really high anxiety or having a panic attack.

So to give people a bit of Brad's background, Dr Brad Lichtenstein is a naturopathic physician, educator, biofeedback meditation trainer, author and speaker. He believes in the healing power of the breath and meditation to shift consciousness and improve health.

Dr Brad created the breath space to help people cultivate the space in their daily lives to open their hearts and breathe with ease. He is dedicated to taking contemplative practices off the cushion and yoga mat and out into the world. So, Brad, firstly welcome, and thank you so much for joining me.

#### **Dr Brad Lichtenstein**

Thank you for having me. I'm glad to be here.

### **Alex Howard**

I'm glad to have you here. So just to open this up a little bit, I think it'd be helpful to lay some foundations in terms of when we're talking about emotions, from your perspective, what are emotions? But also how does that understanding relate to anxiety and, particularly, panic attacks being our particular focus in this conversation?

## [00:02:13] Dr Brad Lichtenstein

I think that's a really important question. I've been teaching at Bastyr University here in Seattle for 20 something, whatever, years...

## **Alex Howard**

A long time.

#### **Dr Brad Lichtenstein**

Yes, I'm not going to say that, that might induce an emotion, but I teach the counseling students as well as the medical students and I always ask, when we start talking about, what are we treating? Oh, I have anxiety disorder and people say I have anxiety or depression, and they want treatment. I always pause and ask, even patients, what are you treating? What is an emotion?

And I say, if you can't define it, you don't know what you're treating. Now of course we have psychiatric manuals, the DSM, and some other systems that say, well, these are the symptoms of anxiety, but we don't describe where it comes from. So my perspective is really shaped by both a Buddhist concept of emotions as well as some cognitive neuroscientists, such as Lisa Feldman Barrett. I borrowed a lot of her work.

But it mirrors really clearly a lot of the Buddhist perspective. Before I ask people, what is an emotion? I say, okay, I'd like you to get mad at me, I want you to rage at me, but don't tense a single muscle and don't think anything. Don't think this guy's not listening to me, or he's a jerk. Don't think a thing or tense a muscle. I haven't yet, so if anybody's listening to this and wants to challenge me, please, I haven't yet met anybody who can get angry at me.

So what does that say about an emotion? So the cognitive neuroscience perspective, one perspective, is that emotions are created from a prediction, and then hence what we call a simulation. Again, these are Lisa Feldman Barrett's words specifically, that we first have to perceive something in the environment. So there is intero or exteroception. In exteroception, you see something outside you. Or interoception, you feel something inward.

And then that information may go up to the brain. It all goes up to the brain, it just doesn't always register. So we pick something up, but then the brain makes a prediction. Now, in some models, they talk about safety and threat and danger, and it's always saying, oh, are we safe? Stephen Porges' model. And I like that a lot, but it's not just safety. It's about how much energy I'm going to have to expend that day, how much am I going to have to do?

So the brain makes a prediction about what I'm going to be doing, just like 100 milliseconds before you stand up, your brain sends signals down to your heart and your blood pressure receptors and everything to say, okay, you're going to stand up. We have to regulate. So it's about energy expenditure. So my brain predicts something, sends signals down to the body, the body has a reaction as if it's going to happen.

And then if it doesn't happen, the brain can then say, oh, can I compare that? So I think of that with what I do in mind body medicine, because it is not just cognitive therapy, which, you know, that was my first degree, training in cognitive psychotherapy. Yes, I love the cognitive perspective. Reframing, shifting focus. That's the top down.

## [00:05:36]

But we can also go bottom up, change the body, change your muscle tension, the way you breathe, and that will change the prediction cycle as well. So this is why both approaches can work really well. So an emotion is a prediction and a simulation. So anytime someone says to me, I'm anxious, I'm feeling like I'm having a panic attack, I'm depressed, I'll ask, how do you know? A very mindful question, right? How do you know? Because if you don't know, you might not be having that.

So for me, emotions are a prediction simulation. And the work to start with is to identify, what am I predicting? I might not even be aware. And what's the simulation? Now, some people will say, what about the physical? Well, if I drink 14 cups of coffee and Red Bull and I say I'm having a panic attack, I'd say, how do you know? You can say, I can feel my heart racing.

But if we know you had 14 cups of coffee. Are you having a panic attack or are you having a reaction to the caffeine? And your heart, yes, is racing or constricting with more force, but you label it a panic attack, and I think it can do us a disservice at times because we don't know then what to do.

## **Alex Howard**

There's something I think really important in what you're saying, Brad, around that awareness. And particularly when we're in states of really high anxiety, or in a state of having a so-called panic attack, that often what happens is that capacity to really recognize what's happening is either offline or going offline. And so just by bringing that in, that alone could start to shift some of the experience.

## **Dr Brad Lichtenstein**

Exactly. When I say, how do we shift our orientation, that's what I'm always asking people. What is your orientation to your physical sensations, to the things you're picking up in the environment? And if you haven't practiced, I think of this as all practice, if you haven't practiced that self awareness that you're talking about, then you're not going to be able to shift your experience in the moment.

So many people leave going, oh, I can't do it, what's wrong with me? It's like, well, you haven't had practice. The Olympic athlete doesn't say, well, I took eight weeks off before the Olympics, so why can't I do it? It's like, I haven't practiced. And I think of it that way too, because I think it's a way of being kinder to ourselves. But, yes, that awareness can shift our orientation and shift everything.

## **Alex Howard**

What you just said about practice, I think, is also an important piece to open up here. In a minute, we'll come to what some of those practices might be. But, of course, often if someone is experiencing that high anxiety or panic attacks, they want something to fix it in the moment. But the point that you're making is that the practices that we build allow us then to hopefully not end up in that moment but if we do, to have something trained that we can respond with.

## [00:08:51] Dr Brad Lichtenstein

Well said, well said. That's exactly what I'm trying to tell people. You need the practice so you can in the moment know what to do. You have the resources. It's like the first time you're driving, you're clutching the wheel and going, oh, my gosh. And then you don't even think about it 30 years later. Maybe you should.

#### Alex Howard

Maybe that's the problem.

#### **Dr Brad Lichtenstein**

Yeah. But at the same time, the more you practice, the more it's going to change the prediction simulation. If the default prediction is the world is on fire, or I'm not safe, I'll use that one, I think, because of negativity bias that's predominant. If we feel unloved, undeserving, I use the word safe very broadly, if I think that no one's going to love me, or my boss is always going to fire me, I'm not safe. I might not die.

So if I'm always having that as my default prediction, so everything I see is through that lens, and I orient that way, then that's going to be the habit. So through practice, we get closer. It doesn't mean we're perfect. It's practice, not perfect. We get closer to developing that as our baseline, or at the very least, we know how to come back more and more with ease. And that's the work.

And I think it's a myth, doctors often say, oh, people just want the pill. People just want something to fix it. I do see that a lot. And I think our culture, especially with social media and everyone talking about the six steps to change everything, I think that does a disservice because I think it reinforces that notion that it should be in an instant.

And I tell people, what have you practiced for so long? If you've practiced, I'm a failure. I can speak for myself, I know how many times I practice that in a day. I mean, I'd like to say that it's gone. It's not. I still have that. Like, oh, did somebody see that? Then I'm practicing it. I'm reinforcing that. Now I know what to do when I'm aware of it and what I can do to try to self regulate. So it is a practice.

#### **Alex Howard**

Yes. Well, let's bring in one of those potential practices. So, let's open up the area of functional breathing and why dysfunctional breathing habits can play such an important role in anxiety and panic attacks.

## **Dr Brad Lichtenstein**

I love talking about breath because it is such a clear example of this prediction simulation cycle. I just ask people to, if they're talking to me about a stressor and I say, let's really imagine it, their breathing changes. And so there's a lot of breathwork techniques out there. I won't list them and name them. And while I've studied all of them and I love breath work, I love really intense breathwork, they're not for everyone and they're not all the time.

## [00:12:00]

And when I mention the word functional breathing, what I'm talking about is at rest, while you and I are talking, not having that debate, or even having that debate, as we're sitting here, or standing, and just going about our day. Functional breathing is about what works most optimally for the whole body, the nervous system, the immune system. And so there's multiple components of it.

It's not just about timing. Timing is part of it. If you look in the Merck manuals and old physiology text, they would say normal, I love that word, breathing is around 14 to 18 breaths per minute at rest. I'd say that might be normal. It's not necessarily optimal or functional. That would be closer at rest, around 12 to 14 breaths per minute.

The rate of the breath is about exchanging our oxygen and CO2. And so everybody thinks about it, but that's not the only piece of the equation. So while slower breathing is important, the inhale and exhale ratio is also important if we're talking about optimal. And many people who are doing things like biofeedback or doing something called resonant breathing know this, that physiologically, when we inhale, every time we inhale, our sympathetic nervous system speeds up.

So anybody who says, oh, I have panic or anxiety, it's like, well, that just gives you a clue. Are you inhaling longer than you're exhaling? And are you inhaling and holding it? You take that nice pause. You're holding it. Your heart rate is speeding up, and so you're dysregulating the heart. Every time we exhale, many people will notice, the vagus nerve gets stimulated and slows down the heart.

So our heart, our blood pressure, gets regulated when we exhale. So there's another component. It's not just slow breathing. We don't want our inhale to be longer than the exhale. There's debate in the literature, is inhale supposed to be equal, or is exhale supposed to be twice as long? That's debatable. As a rule of thumb, if you're working with regulating your nervous system, you don't want your inhale longer than your exhale.

You also don't need a big volume of air, because now what we're doing, when we take a big volume of air in, we're getting more oxygen in. People who usually do the gasp and by the way, wonderful TEDx talk about email apnea. Email apnea, apnea means holding the breath, and the speaker talked about every time people look at their email, and I've seen this on biofeedback devices when I hook people up to biofeedback, they look at their email or social media, and they go, gasp.

## **Alex Howard**

Yeah, wow.

## **Dr Brad Lichtenstein**

So what have you done? You've dysregulated your heart. You've gotten more oxygen than CO2, which then has a chemical pathway that then changes your blood vessels. When you have more oxygen than carbon dioxide in your bloodstream, the hemoglobin doesn't want to release the oxygen. The covalent bonds get tighter.

So people will tell you if they're having a panic attack, I can't get enough air in. You put a pulse ox on or measure their CO2, they have enough oxygen, typically, there are cases and issues, but most of us have enough. But we feel as if we don't have enough oxygen, so we breathe more. Well, we don't have enough oxygen to the tissues because it's not getting there.

## [00:15:49]

The more oxygen you have, the more the blood vessels constrict. Your hands get cold, you get numbness and tingling. The heart beats faster and stronger, and you go, I'm having panic. Well, maybe you're just not breathing functionally. And so there's also that part about O2 and CO2, we could go into that for hours.

And then there's the other part that I think many people discount. Posture. Since the pandemic, I've been doing all telehealth. I love telehealth. It works really well. And it works well because I'm looking at people and I go, is that your setup? Is that how you're sitting? And we sit like this, no wonder we can't breathe.

Everyone talks about diaphragmatic breathing. Well, most of us are always diaphragmatically breathing. The diaphragm is moving, it just doesn't have enough room. So we might use accessory muscles to breathe. So there is no breathing into the belly. It's that the diaphragm moves into the belly, or the diaphragm moves and lets the ribs move. But the diaphragm is often moving.

But if we don't have aligned posture, we're not going to breathe optimally and it's going to be less efficient, we're going to cause more energy expenditure, we're going to be more fatigued and then we're going to have to take these bigger breaths because we're not breathing properly.

So functional breathing involves posture, placement of where you're breathing, the rate, inhale and exhale ratio, volume, and all of those things, and effort. Can it be effortless? So I often talk about functional breathing for that purpose. When we talk about exercising, that's a different type of breathing.

## **Alex Howard**

Yes. Let's talk a bit about some of the process of changing the breath. What helps us do that, in a sense, what's the optimum that we're moving towards and how do we get there?

## **Dr Brad Lichtenstein**

There's a number of ways. The first thing I do with people, whether it's remotely or when I was in person, is do a postural assessment. I invite people to find a posture where they're not leaning on their elbows and sitting on the desk, where they're upright...

## **Alex Howard**

You're not liking my studio set up here, are you?

## **Dr Brad Lichtenstein**

I love the background. I really do... Because think of what we do, when we do that, we immediately internally rotate our shoulders. And then what happens is the rib cage then descends down and then the ribcage starts sitting on that diaphragm and there's really nowhere to breathe. We can breathe in the back body, perhaps, but it's more effort.

## [00:18:34]

And so the other thing that happens is the sternocleidomastoid and some other postural muscles start to move our neck forward. And I just have people sit up and I say, look down, as if you're looking at your phone, and breathe, and then just bring your head back, it's like it's effortless or less effortful. The problem is it's effortful to hold their muscles up if they don't do some release.

So I often do a postural assessment. I'm sitting at a saddle chair, so there's no back and it causes my knees to be lower than my hips. So I always talk about postural alignment, always. If that's difficult for people, I do talk about therapeutic exercises, massage. Massage, I think it should be part of every single national health plan. At least one a week for everyone, just to release these muscles so that we can sit up.

And I will tell you that a number of people, once they do release these muscles, find blood pressure issues resolve, anxiety resolves, again, I'm not treating those, we're talking about the posture. So that would be the first thing. And that's all a lot of work into itself.

The next part is just learning to be really familiar with your breath. I lead everyone through a breath inquiry. It's a breath meditation, but it's more of a way of looking at all those things that we just discussed. The posture, the rate, the gaps, the pauses. Then the easiest practices, I want people to know on their own first hand experience of what's happening with the breath in.

Unless you have a pacemaker, your heart should speed up. Now, a lot of us are decompensated or on medications, it changes, but just feeling your pulse, just feeling your pulse, I have everyone take a breath in, hold it and see what happens to their pulse. And then take a very slow exhale and see what happens to their pulse. And so they can start to... inexpensive biofeedback device.

Some people can't feel their pulse very easily. So that would be part of just the experience of really feeling what's happening. Now for people who have what they call panic attack, I remind everybody what's the armchair treatment, armchair psychologist treatment for panic attack? Breathing into a paper bag. Not a plastic bag. I had a patient once say a plastic bag...

### **Alex Howard**

Not a good idea.

### **Dr Brad Lichtenstein**

That would end your panic attack.

#### **Alex Howard**

In quite a final way, which is not probably what you're after.

## **Dr Brad Lichtenstein**

Yes, please hear that. And the reason is you breathe into that paper bag, you still breathe at the same rate, but you start to breathe in that carbon dioxide. You're recycling carbon dioxide which then displaces the oxygen. The oxygen then gets to the tissues, the blood vessels open, the heart rate slows down.

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So if we know that, and that's not the best way to deal with it, what I encourage people to do is start to count their breath and see if they can make it slower. It's a very, very simple technique. Now, people who have what we call stressed body focus, the minute they focus on a body sensation, they become hypervigilant. The body sensation isn't safe and they start to predict more.

This could be challenging for them. So this is where we have people put on a pulse oximeter so they can look at their oxygen saturation and they can say, okay, even though I think I'm not getting enough, I am. And that can help quiet the mind. But what I would simply do is have people start with three. They breathe in three counts, out three counts.

Now, many people who call themselves having anxiety or panic will breathe like this, in two, three, out, two, three. In two, three. No. In two, three. Out two. And then we start to extend that when that becomes easier to four and then maybe five. But we have to be in that aligned posture. So when I'm coaching them, it is coaching, they have to find that upright posture and then focus on letting only the lower hand on the belly move.

So there's a lot to focus on with that. That is one of the ideal things as a training in the midst of panic or anxiety or feeling that hyperventilation, what we call with chronic hyperventilation, you want to extend your exhale. So one of the simplest rescue breathing techniques, I'd say, is just exhaling through pursed slips. Breathing in normally, not taking a big volume of air in and seeing how long you can extend it. Now, the problem is, what do most people do at the end of that?

### **Alex Howard**

They breathe in fast and hard. Yeah.

## **Dr Brad Lichtenstein**

I mean, there's so many devices. I collect them. There's so many devices to help people with it. I won't name them, I'm not sponsored by any of them, but there's like breathing devices. This is like a little whistle almost, and it was developed by two people for anxiety. There's a number of kinds of this. And what does it do when you're feeling panic or anxious? No matter how hard you try, you can't get the air out faster.

For some people, that helps to have something tangible. There's other devices. This looks like it's an inhaler, but it's not. But what you do is you breathe into it and as you exhale, it tells you when you can inhale again. You don't need a device. You don't need to spend, unless you like jewelry. You don't need that. Just learning to inhale slowly.

You're regulating your vagus nerve. You're slowing the heart rate down, you're opening up the blood vessels. And then you just really work on mindfully closing the mouth, breathing in again. It is challenging to do.

## **Alex Howard**

In some ways, there's two challenges isn't there. There's the challenge of whilst having a panic attack or being in a state of high anxiety, remembering to do something and being willing to let go

of the momentum. Because sometimes we get anxiety about anxiety, about anxiety, and there has to be a certain breaking of that momentum to do something different.

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But it strikes me that one of the challenges with practicing in day to day life is that our breathing is something which happens so unconsciously that we can't just once decide to breathe differently. There's got to be a real consistency in working to change that unconscious habit.

## **Dr Brad Lichtenstein**

Thank you. The reason I talk about practice is because this CO2, O2 thing, we can change our CO2, O2 concentration in our bloodstream within three minutes. You can do that, but you have not just oxygen and carbon dioxide and breathing that impacts it, you have a number of other systems, like the kidneys, that regulate bicarbonate to keep that CO2, that acid based metabolism, the same. You have a number of different functions.

But the brain stem has many respiratory centers, the dorsal respiratory centers is one area that helps regulate unconscious breathing, but it also is connected and reading our CO2 and O2 concentration levels. It's like a thermostat. I'm oversimplifying it. I know I am. But if you set the thermostat to 90 degrees and you're schvitzing and it's hot and you're like, sweating and you're fanning yourself, you're opening the windows, it doesn't care. The minute it gets down to 89, it kicks the heat out again.

That's the same thing that's happening with your brain stem. After three days of your PH balance, your brain stem is saying, okay, this must be your normal. So if you've had a stressful experience, my students, you have midterms and finals and you're mobilizing and holding your breath and you're raising your PH because there's more oxygen, you're raising your PH levels, then the brain stem is going to say, okay, this is your new normal.

Okay, this is your new normal. Then every time it dips, I'm going to tell you to breathe. It's not functional. It's just what you've conditioned. So to your point, it's not enough when you have a panic attack to just do that. I recommend, and so many biofeedback experts and trainers recommend, doing this 20 minutes, some people say 20 minutes twice a day, of paced breathing.

So what we would do is be doing paced breathing, usually around six breaths per minute. Six breaths per minute is the ratio. It's not a magic number. It's based on normal physiology that when your heart rate speeds up, within 5 seconds, your blood pressure changes, when your blood pressure changes within 5 seconds, roughly.

Now, everyone is slightly different, but they all gravitate around that six second cycle. So some people might be a little bit slower, some people will be a little faster. And when we connect our breath to that, heart rate and blood pressure cycle, we get what we call cardiopulmonary resonance. So some biofeedback practitioners or apps will help you find your ideal breathing.

But I know many people who just say 6 breaths per minute, 4 seconds in, 6 seconds out, 20 minutes, twice a day. It starts to set that training. It's not going to happen in a week. Most protocols I've seen go anywhere from 5 to 10 weeks of daily practice, and then you can back off after you've mastered it a bit. And like you said, to your point, not only am I going to then change

my nervous system so I'll respond to triggers less, but then in the moment, I'm in a trigger, oh, I know how to do this. I've done it enough.

## [00:29:25] Alex Howard

Yeah. Somehow, as you say, until you reset that homeostatic balance, you're just going to keep going back to being in that pattern. And I guess that's where it's partly the awareness, but it's partly also the discipline. I think sometimes the tricky thing here can be that one gets so normalized to being in a dysregulated state that they don't really believe it can be different.

And by definition of being in the state, it robs the resources they need to do something different. I'm curious as to when you're working with people, particularly those first few interactions and how you get people to, I guess what I really want to say, is knuckle down and do the work.

## **Dr Brad Lichtenstein**

Well, that's a really amazing question that if everyone knew the complete answer to do with everyone, we would have no issues, no addictions, no behavioral problems. There's several things with that. When people tell me, I didn't do the practice today. The first question I have is, well, what did you do instead? We love to talk about what I didn't do. I didn't do this, I don't do that.

Well, what were you doing and what was the payoff? There is some benefit to it and I remind everybody, and some of these are Porges' words, our neurobiological adaptive response, our pattern, our default pattern is a neurobiological brain body adaptive response. So I want everyone to know, of course it's challenging to practice. Of course it is. So don't judge yourself.

That's one of the things that we have to work on, and at the same time say, well, what do I really want to be doing? How do I want to do that? What helps me is I have people, many, not all, buy certain biofeedback devices either on their desktop and we share it during a remote session or on their phone, and they can actually see, oh, when I do this, look what happens to my physiology.

Just my heart rate. Look at my skin conductance, changes. And then they say oh, well, there is some benefit. But you know this, you know this too, we all know about smoking and certain lifestyle behaviors and exercise and movement and we sit on the sofa anyway. It really is about, part of this practice is, asking, how do we want to show up every day?

And so a lot of my work is helping people explore and challenge their belief of how they should be. And I think here in the States, one of the biggest things is productivity. I've got to be productive, and we have to define, what does that mean? Does that mean always be chronically mobilized? And many people feel safer when they are because they think they have control.

So to your question, we explore that. We explore that. Not judge people if they can't practice. I know some practitioners will say, look, if you're not practicing, I'm not going to work with you. And I say, well I'm working with you because I want to know, how do you want to show up? This isn't easy. You know, if it was easy everybody would be doing it and there'd be no problems.

## **Alex Howard**

I think that that control piece is particularly interesting, isn't it, because one of the almost defining characteristics of a panic attack is that we feel out of control. We feel like this thing is happening

and we can't stop it. And that makes it all the more terrifying. And, so, the point that you're making, I really like, around having feedback, for example, biofeedback devices, that can show, well, hang on, actually, maybe it's going to take two or three minutes for my biochemistry to settle and for the panic attack to pass.

## [00:33:18]

But I can see that these things I'm doing are laying the foundations for that change to happen in a few minutes time. And so it strikes me as something about changing one's relationship with that experience so it feels less overwhelming.

#### **Dr Brad Lichtenstein**

That's it. That's what I was saying about orientation, changing your relationship. This is why I say when people tell me they have panic attack, I say, well, what if you just don't know how to breathe? For many people, not everybody, I'd like to know what people think when they hear that. Many people go, wait a minute, so there's nothing wrong with me. I just don't know how to breathe, and my brain stem has been conditioned?

Just like it's been conditioned, any athlete's body gets conditioned a certain way and then they have difficulty doing another sport. It's just conditioning. And, so, what is our relationship? So when I start with people, the very first session, I ask, how are you orienting? We explore that. What's their body doing, their breath doing, their images, their thoughts, their narratives? But equally important, we have to define, very explicitly, how would you like to orient?

How would you want to orient when... I'm here in Washington, it's snowing today, actually, surprisingly. But if there's a fire outside, we're not saying you should breathe slowly. Mobilize. It's appropriate for the situation. How do you want to orient, though, when no matter what happens? Now, the reason I enjoy these conversations is my first work was in HIV care.

I started work back in the 90s, I did some HIV care before that, and most of the people with whom I worked aren't alive anymore. I also worked in hospice, doing bedside hospice meditations. And so I'm not trying to play a card here, I say this, it's like, we knew the outcome, right? It's not like some other cancer treatments or other things, and it's not like HIV now. But it's like the conversation was, okay, here, we can do these herbs and these things and help you with your medications.

But how are you living with this? How are you relating to the symptom? How are you relating to yourself? What are you saying to yourself about the symptom? And how do you want to be in this moment? How do you want to be no matter what? And that can be reflected pulling it back to the breath, because if you're saying I'm at peace, I'm at peace. I'm like you ain't at peace there. So it's about creating that relationship.

## **Alex Howard**

Yeah. And there's something about, also, the power of just really being present to the experience because I guess also, just closing our loop a bit on panic attacks, that that sense of panic is a sense of not being in control and being dysregulated and feeling like something's happening in the future. And something about that presence and just coming back to what's happening right here and right now, particularly if one's doing interventions that's allowing the panic to pass, but the

biochemistry needs time to catch up. So, that piece of being present and how important that is as well.

## [00:36:30] Dr Brad Lichtenstein

And we realize, going back to the prediction simulation model, I'm predicting something, this sensation is panic. It's panic. Something's wrong. Now I'm mobilizing. If I can change that relationship, it's like, oh, I do have some agency, or even the thought of, I've had these panic attacks before, I'm going to live through it. That shifts it.

There is something called the hyperventilation provocation test, I believe, for people with panic attack, you start to have them hyperventilate, and within 10, 15 seconds they go, oh, no, I don't like that. It's like, wait a minute. You're in my office. You're right here. You're safe. Does that help you realize, just changing your breath, you're not aware of what you're breathing?

Most of the people come back, the second week, they see me and say, I did not realize how often I'm holding my breath. And then they go, I can't change it. It's like, oh, not yet. So it fits with what you're saying.

#### **Alex Howard**

And in a sense, also, when someone has those experiences of places where they historically have had panic attacks, and then they have experience of not having one, or when they go a longer period of time without, I guess that also gives them more confidence, which then reduces the overall anticipation and the self fulfilling prophecy that people can have.

#### **Dr Brad Lichtenstein**

And that goes back to that simulation cycle, because the next part after the simulation is comparison. It's like, oh, wait a minute, I didn't die, then most of us will say, yeah, but that's a one time thing, or it was the moon in this... I'm not being dismissive of that, whatever it is, it's because my friend was with me, but if my friend's not with me, I can't do it.

And so when we start to say, oh, I did that, I did that, that means I do have the ability to do that in another time, and I won't always. The other piece I always want to enforce there is and you won't always. Can you be okay with that? The minute you can say, I might have that happen again, and it is okay. I am okay. That's the important, ultimate shift here.

#### **Alex Howard**

Yes. There's something about people coming back to that place of safety in themselves. And to just kind of bring this towards the end, what you're really saying is that there's the practices one uses to break their habits and their day to day, and then breaking the relationship to that panic if and when it happens, so it doesn't have the power it otherwise has.

#### **Dr Brad Lichtenstein**

Great. You said it well. I need to keep you with me. Yes, that's it. And all of this is about shifting our orientation to the present. I mean, this is the moment and we're constantly living three steps ahead.

## [00:39:34] Alex Howard

Yes. Great. That feels like a good, natural endpoint. Brad, for people that want to find out more about you and your work, what's the best place to go and what's some of what they can find?

#### **Dr Brad Lichtenstein**

The best place to go would be my website. It's <a href="thebreathspace.com">thebreathspace.com</a>. And on that I have some of my guided meditations. For two and a half years, I was doing guided meditations, live streams, and I'm going to be doing those again in the new year. But I've had classes. I have classes for practitioners about biofeedback and teaching breathwork.

But for the general public, I have a lot of guided meditations that I've stored from those live streams. They can watch that. I have some other discussions about different aspects of breathing on there and just not even breathing, just orienting to the world in a different way.

## **Alex Howard**

Fantastic, Brad, I really appreciate your time. Thank you so much.

## **Dr Brad Lichtenstein**

Thank you.