

Episode 511: Dr. Amishi Jha on the Crisis of Attention and Cultivating Mindfulness

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Katie: Hello, and welcome to the Wellness Mama Podcast. I'm Katie from wellnessmama.com and wellnesse.com. That's wellness with an E on the end. And, this episode is all about the crisis of attention, cultivating mindfulness, and developing peak mind practices. I'm really excited about today's guest. I'm here with Dr. Amishi Jha, who is the professor of psychology at the University of Miami. She serves as the director of contemplative neuroscience for the Mindfulness Research and Practice Initiative, which she co-founded in 2010. She received her PhD from the University of California, Davis, and postdoctoral training at the Brain Imaging and Analysis Center at Duke University. Her work has been featured at NATO, the World Economic Forum, and the Pentagon. And she's received coverage in pretty much every major news outlet for her work on attention.

And, in this episode, we go deep on that topic and the different types and factors that relate to attention, including the three subsystems of attention, the direct way that stress impacts attention, and what else can as well, what mental time travel is and how that comes into play, how attention affects the way we think, feel, and connect with others. An important point, why multitasking isn't actually possible and what we're actually doing instead, and how she recommends combating this. We go into a lot of other things, including how to cultivate resilience in ourselves and our kids. And she provides some practical things that we can do, both as adults and with our children, to help cultivate better attention, mindfulness, and resilience. Really fascinating episode. She is so well-spoken. So, let's jump in and join Dr. Jha. Amishi, welcome, and thanks for being here.

Dr. Amishi: Oh, it's great to be here.

Katie: I'm excited to jump in and deep dive on the topic of attention. But before we do, I have a note in my show notes that you were once trapped between an elephant and a bus, and I just have to hear this story.

Dr. Amishi: Yes, that was one of the more interesting experiences of my life, I guess. I was actually visiting family in India, and attempting to cross a very busy street, and finally made it through realizing that a bus was about to swerve. Like, you know, a little boy had run to the middle the streets, the bus swerved, I was then kind of pinned against what felt like a wall, and I looked up and it's an elephant. And all of a sudden, I'm between a bus and an elephant. I was really reflecting on what an odd moment that was. But thankfully, we maneuvered through and everybody was safe.

Katie: Wow, thank goodness everybody was safe including that little one. I don't think most of us here have had the experience of encountering an elephant on the road. That's amazing.

Dr. Amishi: It was interesting.

Katie: You are a well-known expert in the topic of attention. You have a TED Talk called "The Crisis of Attention," which I will link in the show notes for you guys listening. I watched it this morning, it's really, really good. I think to start broad, I'm guessing everybody has some definition in their head of the term attention, but I would love for you to actually define that so we know what we're talking about as we move forward.

Dr. Amishi: Yeah. You know, that's what I study in my lab at the University of Miami. And, you know, given that I've been studying attention for the last 20 years, it's a term we throw around a lot, most of us probably think it has to do with the ability of the mind to focus, but it's a much broader term, actually. And it really has to do with this capacity of the brain to select and privilege some information over other information. Now, oftentimes when we say focus, we think that that means, you know, hone in on some detail. So, right now, you know, whoever's listening to us right now will be honing in on the sounds of our voices, not probably, if

they're in a coffee shop, the sound of the espresso machine or chatter nearby, but kind of focusing in. But there's other ways we can select information and privilege it as well. So, I actually think about attention as not one thing, but three main things. And I think it might be helpful to kind of unpack that because that has a lot to do with how we might be able to work with our attention to strengthen it and to really make sure that we keep it in peak shape for a lot of good reasons, which I'm sure we'll get into. Does that sound good?

Katie: That sounds great.

Dr. Amishi: Yeah. So, the first thing, I guess, is to say, even though, as you mentioned, you know, this notion of a crisis, we do feel often that our attention is in crisis mode these days. But it is, still, as a brain system, a success story of our collective human evolution. The fact that we have an attention system is really a boon for us, and we can do so many incredibly powerful things. And to do so, to do complex, important things that we do daily in our lives, like I said, we think about attention as actually being divided into three main subsystems. And the first subsystem is very much like that term focus that I was mentioning a moment ago. And I like to use the metaphor of sort of a flashlight. So, if you're in a darkened room, or if you're in the woods somewhere going for an evening walk, and it's starting to get a little bit darker, a flashlight is, of course, an extremely handy tool. And wherever it is that we direct that flashlight, we get clear, crisp information, but only where we're directing the flashlight, not everywhere around it. So, again, it advantages some information over other information.

And the really cool part of this sort of metaphor is that just like an actual flashlight, we can direct our attention, we can decide where to put it, where to actually orient it so that we can use it to look, not only at the external environment, or even hear sounds, or whatever other sensory system we might want to kind of key in on. But we can use that same flashlight to direct our mental resources internally. So, we might think of a particular memory, for example, and when we want to kind of unpack the memory, we direct our attention to it, the internal flashlight can go toward it. But another way to pay attention is almost the exact opposite. It's not the sort of narrowing and privileging some information or other information, it's actually privileging the present moment. So, right now, what is going on right now? And this is formally called the brain's alerting system because its job is to ensure that whatever it is right now, that's happening, we're attentive to it. So, that means we're not actually narrowing in, we're broadening, we're receptive, we're aware of what's happening in this moment.

And if you want to think about a time when we do this, we do this all the time, but one kind of a good example would be if you're driving down the road, or you're walking down the road, and you see a flashing yellow light, so it could be near a school zone, or maybe a construction site. And usually, what that means to us when we see it is, "Ah, stay alert, vigilant, pay attention to what's going on right now." Because what we may encounter is a strange traffic pattern, or maybe children running in, or construction equipment, whatever it is, we don't know what, so we can't focus in like the flashlight, but we stay broad and receptive. And oftentimes, I'll give the metaphor of a floodlight because it's almost, like I said, opposite side of the spectrum of the flashlight. So, both those give us a good indication of different ways we pay attention, whether it's a certain content or a

certain moment, meaning right now. But there's a third way we pay attention that's also really, really powerful. Something we call executive control.

Now, that term executive is actually the same term that we use for executives of organizations. And the executive's job in the brain system kind of point of view is to advantage what we're doing right now so that it aligns with our goals. So, it's like seeing what needs to be done, what the goals are of the organization, or, in our case, the individual human being, and make sure our actions align with it. And when there's a mismatch, to course correct it. So that might mean we have to, let's say, our goal is to, I don't know, go somewhere, we want to make sure that we follow the route to get there. And if we veer off track, we got to get ourselves back. So, that just gives us kind of a broader view of, you know, it seems like a seemingly simple question, what's attention? But it's really handy to think of these metaphors, this flashlight notion, floodlight. And then I like to use, for executive control, the notion of a juggler because our job is to make sure sort of all the balls, all the goals stay up in the air, we're really attending to them, and we're managing our behavior and our goals in this kind of fluid manner without dropping any of those balls.

Katie: So, you mentioned your research. What kind of catalyzed your interest in mindfulness and attention?

Dr. Amishi: Yeah. You know, so I just mentioned all these different things about attention, and it ends up that each of those systems can become quite fragile and vulnerable. So for the flashlight, for example, it might not point to where we want it to go. So if you think back to that kind of picture I painted of us walking on a darkened path and having a flashlight, if you heard a strange rustling or a weird sound, you would take that flashlight and, boop, you know, kind of all of a sudden, point it to wherever you thought you heard the sound from. It gets yanked around. And the things that yank it around are things that are potentially threatening, or novel, or uncertain, or even self-related. If somebody calls your name out when you're walking down the road, you'd definitely turn your head to figure out who's calling. So, there's this tension point between what we want to do with a flashlight and where it might go for other reasons.

And then the same thing with the floodlight. Sometimes the floodlight can become...we can become overly alert or what's called hyper-vigilant. And also with the juggler, we can definitely drop the balls and executive control doesn't work all that well. So, in my lab, we work with different kinds of populations, from groups like, you know, military service members, military spouses, first responders, medical and nursing students. A lot of different groups for whom the professional and personal lifestyle are very high demand. And it ends up that when we are in kind of stressful and uncertain circumstances, attention can become problematic. So, my interest has always been in sort of, broadly speaking, how the brain works and how we can change the way it works for the better. And attention ends up being a very, very powerful system that can be disadvantaged. And mindfulness really entered my lab as a solution to train attention, to make it stronger and better equipped to rise to the challenge and work well no matter what.

Katie: That makes sense. And that's a really cool analogy to think of attention in those different ways. I know I've noticed, you mentioned stress as well, at least in my own life, when I am perceivably under a lot of stress, I

notice parts of my attention having more trouble or at least the parts that I'm aware of. So, can you talk more about what stress does that impacts our attention?

Dr. Amishi: Yeah, Yeah, great question. And I think you're not alone, certainly, all of us I've encountered that experience of like, "Ah, my mind isn't right here where I need it." And that really was my motivation for writing this book I've written recently, "Peak Mind," because after doing decades of research, I really was thinking we're at a point now where, you know, it's not just these very, very time-pressured, performance-pressured groups, like I mentioned, these service members, first responders, etc., it's all of us. We're all in this sort of global crisis mode with our attention. And yes, stress is a big, what I call, kryptonite for our attention. It actually does cripple it. But there's other things too that can damage or degrade our attention. And the three big E's are really, like I said, stress would probably be one of the bigger ones. Threat, and this could not just be threat for our sort of physical well-being, or our, you know, physical safety, for example, but even our psychological and social safety. So this notion of psycho-social threats, you know, our reputation, or what we want to have done, our stature may be threatened, and that's just as powerful. Or think of certain kinds of biases, where there's views of us that we may not agree with, or views that we feel are really, really too high and we can't meet or match the expectation set before us.

So, stress, threat, and then the third one would be poor mood or negative mood. When we experience any of those, and frankly, we can't lead a life without experiencing those. It's just part of being human. But when we experience those, and we experienced them, for example, over weeks and months, sort of like what often happens for people during demanding circumstances that are professional, but for all of us, frankly, happened at some level during the global pandemic we just experienced, we can feel that pinch, and we start feeling cognitively foggy.

So you asked such a great question, Katie, regarding what is it that happens? Why do we feel that way? What does stress do to our attention? And, again, it's going to rely on something that is actually a feature of our brain but can sometimes feel like a flaw. And one of those things is something called mental time travel. So, essentially, you know, we talked about the flashlight, for example, we can, not only experience the flashlight and direct it where we want in the moment, but we can take that flashlight and rewind the mind to the past so that we're reflecting on experiences that have happened before, or we can fast forward the mind and plan for the future.

And that's very productive and powerful thing that our mind can do, but often when the circumstances are demanding or feeling overwhelming, we rewind and fast forward unproductively. So that we're not just rewinding to reflect, but we're ruminating, or regretting events that have already happened. And you know, they're in the past, they're no longer happening in our present moment. Or we fast-forward things. So, we're not just planning but we're catastrophizing and worrying. And when we do those things, it's not just that we might start feeling even worse, but our attention gets hijacked away from the present moment. We're not here for what the demands are and the needs are of the moment. So, that can cause a lot of problems. And we think that's what's contributing to actually mistakes happening in the present moment, mood getting worse. And this statistic regarding how often this tends to happen, this wandering mind is about 50% of our

waking moments. And that's a little bit of a wake-up call. That means half the time, our mind is not in the present moment in the task at hand. It's either in the past or the future.

Katie: Wow. That is a bigger stat than I would have expected. And I've heard that quote that worry is a waste of imagination. But that really kind of hones it in because you're right, it takes you out of the present moment. And you've kind of alluded to this in several ways already, but I would guess from your research, attention plays a big role in a lot of areas of our lives. And so if we can improve that amount of time that we're presently focused that probably has benefit throughout a lot of areas of life. But can you walk through some of the ways that...the functions of attention in daily life?

Dr. Amishi: Yeah, absolutely. And yes, you're right, I am hinting toward it and your hunch is correct. Because we know what it feels like when we meet somebody, for example, that we would say is not attentive, whether that's a colleague, or a co-worker, or family member, or leader we might encounter. And, you know, usually, that means the person is potentially illogical, like, their decision making doesn't seem sound. Their mood may be dysregulated so it doesn't feel like they're really in control of their emotions, they're kind of haywire. And they have that feeling of disconnection, where they're not really aware or attuned to the people around them. So, we all know what it feels like when attention may not be successful. But partly, what I'm saying here is that it's because attention itself is a fuel, and what it fuels is three very, very important things that we do constantly and that we really rely on our attention to do. So one broad category would be thinking. And what I mean by that is just having an idea of memory, or a thought, whatever it is, pop into your mind and then pursuing it. You know, that's really attention. That's the flashlight being able to kind of go, almost, like, hyperlinking that you might do on the internet, go from one idea to another related idea to another related idea. And that's what complex thought is.

So, our ability to think, which actually also ties into things like learning, decision making, reflecting, all of that relies on our attention. All three systems, actually. Another big area is feeling. Now, I mean, when I say feeling, experiencing an emotion. Whether that's a very pleasant emotion or unpleasant emotion, just being able to experience it requires our attention. And that may seem a little bit odd, like, what do you mean? I just feel the emotion. Yes, but to actually know you are feeling it, requires a knowledge and an attentiveness toward the experience. Sometimes it takes other people to kind of cue us in to what our mood might be, for example. But beyond just feeling emotion, we need our attention to regulate our emotion. What I mean by that is having a proportionate emotional response. So, for example, if somebody receives really bad news, you know, they didn't get a job, or they lost their job, it's very appropriate have strong emotion, but probably not okay to burst into tears if you topple over a cup of coffee. I mean, it's annoying, but you wouldn't just lose your mind completely.

So, this is what we do in order to regulate our emotions is we use all three systems, in particular, that executive control to say, "Okay, what are the goals right now? Is this an appropriate response I'm having?" So, thinking, feeling, like I just said, and the third one would be connecting, our social world. And here, attention we need to, you know, and we think about this all the time, you know, saying to somebody, "Oh, we're on the same page." Essentially that means both of our flashlights are kind of oriented toward the same mental

content. We're sharing a mental model with other people. We can, of course, also pay attention to other people. In fact, all these brain systems of attention allow us to consider other people the targets of our attention. And we can use attentional capacity to empathize to kind of take somebody else's perspective to understand what they may be experiencing. So, you know, this just points out to us that thinking, feeling, connecting, which we do all the time and we lean on, frankly, we need it to be successful. And if we don't have our full attentional capacity, we can't do any of these things successfully.

Katie: That makes sense. And there's so many directions I want to go as a follow-up to this. But from listening to your TED Talk, I have heard you address a little bit that stress component, which you mentioned can really affect attention. So I'm curious if there are any tips for overcoming that stress or being able to maintain attention, even if we're in a state of stress. I've also heard you mention why, for instance, thinking positive by itself is not the answer, so can you kind of delve more into that stress equation?

Dr. Amishi: Yes, yes. I mean, typically, when we think about stress, what we're talking about is distress. So the demands before us, what is required of us and what we feel like we can actually handle are not matched up. Essentially, we feel incapable of rising to the challenges that were required of us. Now, if there's a little bit of a challenge, meaning the right amount of stress even, we might say, "I'm activated. I can rise to that demand." And it ends up that stress itself has sort of an inverted U shape. So, think about the letter U and turn it upside down. And think about the X-axis is like the level of stress, and the Y-axis as performance. So, if you think about that upside-down U, when there's very little stress, performance isn't that great. You know, you have a report due in two years, you're not going to start working on it immediately. As the level of demand increases, you're going up the mountain of the U, so to speak, upside-down U. As the level of demand increases, and the stress itself increases, our performance starts getting better and better, till we reach sort of a sweet spot, the peak of that inverted U shape. But then if we push past that, and the stress continues or is even greater, we'll start sliding down so our performance is going to get worse.

I think just understanding that it's not that all stress is bad, it's that some level of stress can actually activate us but too much will actually cause us to, in some sense, not be as effective. And this is a really important point. Even if the amount of stress you have under normal circumstances feels like, you know what? This is the right level of challenge. Let's say, it's a Monday and you have a big report due on Friday and you've got the days to work on, it feels good, it feels important and you have to rise to the challenge but you can. But if that level of demand is protracted so you have to produce a report, you know, also the next day and then the next day and then the next day, you probably will start slipping into distress. It's just a natural response. So, just knowing the landscape of stress, I think is important. To know where we're at, you know, am I really in the upward part of that curve, or am I really experiencing distress? And then to watch the mind, you know, the tips I would give, and this is where mindfulness comes in. In some sense, part of the culprit we've already been talking about, it's not potentially the demand itself that is causing the problem, it's the worry about the demand.

So, if we're so worried we won't make the deadline or our performance won't be up to par, or we'll be judged harshly, that is outside the scope of the work we actually need to do, but it takes up a lot of our attentional bandwidth. That flashlight's getting yanked around, that floodlight is a kind of hyper-vigilant mode. And it

starts feeling like the juggler's dropping a lot of balls. So, one of the solutions, and, in fact, the reason that mindfulness training became such a powerful potential answer to the problem of attentional degradation is because it's, in some sense, mindfulness itself, is about keeping the button, not on rewind or fast forward but on play, if you use that kind of mp3 analogy of the mind. We're not mentally time traveling. And mindfulness means paying attention to our present moment experience, being in the here and the now without a story about it, without elaborating it or even emotionally reacting to it. That seems easy to say, maybe, you know, it's like, okay, I'm here, I'm here, right now, right here, but oftentimes, this very overwhelming circumstance will slip back into mental time travel without knowing it.

So, a lot of what we do, and in fact, the research that we've been up to for the last, like I said, about almost 2 decades now is training people, offering simple training techniques that people can do for about 12 minutes a day is what we found the minimum effective dose. To train the mind to be more aware of where attention is moment-by-moment, and then bring it to the here and the now without a story about it, without reacting. So that we're actually able to face the challenges without sort of having an editorializing component about the challenges themselves, which just pulls us away from doing the task at hand.

Katie: That's so fascinating. And I know often technology is blamed as being one of the reasons that our attention is more all over the place right now, or that at least to a lot of parents listening that our attention is not with our kids often, and it's more on our phone. I'm curious, what's the research saying about how technology is impacting attention? Obviously, this is a new variable that is changing over time, but how does that impact our attention on a daily basis?

Dr. Amishi: Yeah. You know, a lot of times people will say to me, "Aren't our attention spans shrinking?" And I'll say, "No, evolution doesn't work at that timescale. It took thousands and thousands of years for our attention system to be exactly the way it is right now." And 10 years of having smartphones isn't going to change that, but it can feel like a crisis because it actually works so well that a lot of other technology companies and technology builders know how it works. So there's a reason that that ping that has that particular pull on us. There's a reason that social media notifications can get us so that certain kinds of content on social media, for example, will make us click, you know, there's a reason it's called clickbait. It pulls in our attention in a very specific way. So, why does that happen? As I said earlier, you know, that flashlight can be directed but can also be yanked.

So, things that are novel, things that are alerting, potentially threatening, potentially self-related, also just bright, shiny things in our world and in our mind, can kind of grab us. And this makes it a constant challenge. So now all of a sudden, you're sitting there, you want to write an email, or your child is trying to do his or her homework, and, you know, a notification pops up and boom, their attention is not on the homework, but on the notification. And now they've got to work to redirect it back. That all takes a lot of mental energy, which is actually going to deplete the fuel that's available at some point. So, you know, an easy thing for me to say but we have to really pay attention when we do it, is to avoid things like what we might call multitasking, which is technically not even a real thing. What we're really doing is, when we say we're multitasking, meaning that we're doing more than one attentionally demanding thing at the same time, is we're task switching.

We're doing one task, and then we're shifting our attention and doing the other task, and then we're coming back again. And as you can imagine, it takes a lot of mental energy to do that. So just the ping of your phone is actually pulling you to another task, another potential task. Or you turn on your particular social media app and you're just scrolling and scrolling, and all of a sudden, you know, you're not doing the thing that you wanted to do. So, the main thing to say is that technology is definitely a challenge for us. Try your best to mono-task instead of multitask in whatever you do, whether it's in, you know, engaging with technology or not. Because essentially what you're doing is you're advantaging your attention system to do a better job. It's not having to do multiple things at once, which really means it's going back and forth quickly.

And if you do need to multitask, or task switch, which is the real term, remember, there's going to be a lag going from one thing to another. And also remember it's going to take energy to overcome the kind of inertia. You know, when you're in one task, you're going to want to kind of stay there instead of going over to something else and then returning back. And know that you may be prone to making more mistakes. So, mono-task when you can, and also, you know, really the broadest guidance I give is, pay attention to your attention. Don't kind of default to auto-piloting your engagement with social media and technology, but know that you're doing it. I'm picking up my phone right now, I'm pressing this link of this app, I'm going to look on this app for a particular reason. And then when you're done with that, get off of it. We have to be monitoring ourselves over and over again. And frankly, the notion that we can just break up with our phones, it's not going to happen, we need our technology to live. So we have to come up with other solutions to train our minds to advantage ourselves.

Katie: That's a great point. In today's technological world, it seems more and more like the idea of breaking up with your phone is not possible as more of our lives are connected to our phone. And I love that idea of monotasking, especially for a lot of the moms listening who the idea of multitasking is so appealing. But like you explained, it's not actually possible. And as you were saying that I can see examples in my life of how hard it is to go back and forth between things, which I think is somewhat a daily struggle for all moms because we have so many things that ping us, you know, your children or your job, everything all day.

One thing I've recommended for that is the idea of batching, which I didn't even think about it in the attention sense, I just noticed I was more effective at getting things done, when I would, for instance, bulk cook a lot at once, or do all of one thing at once and just focus on that. And from what you're saying it seems like that applies to so many areas of life, and can be really valuable. So is there any more to understand about the idea of paying attention to our attention? Or is it simply having that awareness? And basically, like being present and paying attention to it as we go, or are there any other steps to that?

Dr. Amishi: Oh, there's a lot of different steps, but I love what you just said. And I think, yes, absolutely what you call batching, I would say, you really strategize mono-tasking, which is awesome. And you mentioned, you know, you've got children, I've got children too, and it is. And I think that it is a lot to multitask. And frankly, oftentimes, we don't feel like we have a choice, you know, it's like one kid needs something and the other kid

need something else. My children are older now, so it feels like I'm getting less and less of those pulls around me. But I remember those days when I'm like, "This is impossible. Like, how can I be combing hair, trying to help somebody with homework, and still trying to get my coffee and get all of us out the door?" Like, it's just impossible. But what we have to realize is yes, what we are trying to do does feel impossible. And we probably are going to get better at task switching if we're switching between the same kinds of tasks.

But we have to be easier on ourselves to know that our attention is being really, really fractured, and having to work in an overdrive mode, that have a little bit of kindness extended to ourselves like you know what? Maybe it's gonna take me an extra beat to answer a question, and that's okay, and to even share that with our children. Like, you know, when mommy's doing this it can take her a little bit longer to maybe answer you, and that's okay, that's just the brain doing what the brain does. So, just kind of keeping that heartfulness in mind is, I think, a very important quality. And oftentimes, when it feels like we're not meeting a lot of these challenges that feel like reasonable things, we just aren't able to do them all, we can get into kind of a self-blaming mode, which is completely unnecessary, and frankly, completely inappropriate. I mean, we shouldn't be blaming ourselves. We're kind of putting our minds in a way that is not the easiest for them. So, I just wanted to kind of add that piece in is that yes, there are solutions, and I love the strategies that you propose for doing it. But in terms of paying attention to our attention... Anyway, I hope, Katie, that last point made sense.

Katie: Yeah, absolutely.

Dr. Amishi: Okay. In terms of paying attention to our attention, I wish all we had to do with kind of keep this in mind. I really wish that's all we had to do. But frankly, it's just not going to be enough because the thing that also goes when we are stressed, threatened, or in a negative mood is our awareness of our attention. It's something called meta-awareness. All technically that means is awareness of where our attention is moment-by-moment, what are the processes and content that our attention is occupied by? This is also very fragile and can kind of evaporate when we're lost in thought or worried about something. We're not usually thinking about the fact that we're having a thought. I mean think about the last time you got to the bottom of the page when you're reading something like you have no idea. You know, the only thing that clued you in that you weren't really there was the fact that probably your eyes reached the bottom of the page, you're like, "Wait, what? I don't recall what I just read."

Or you're having a conversation with somebody, and maybe you're lost in thought of the preoccupation you have, and if the person is saying, "Are you listening?" That's certainly happened to me where I'm, like, kind of in my own world. So these external cues can help us regain our presence to say, "Ah, get back here right now." We don't often do that with ourselves, which is when mindfulness training can be so helpful. These are practices that we can do every day for a short period of time. And frankly, as busy parents, we know that, and we don't have a lot of time so we got to take these moments as we can, but we have to really give it a shot. Because the only way we'll be able to get our mind back on track if we get lost is to know where it is in the first place. So, maybe I could just offer one quick practice that I think is very helpful, and that ends up being one of

the foundational practices we offer to a lot of high performance but time-pressured professionals, which is frankly, all of us.

So this is something, it's a foundational mindfulness practice, it's called little formally called a lot of different things, mindfulness of breathing, maybe, or a stillness practice, I have called it the find your flashlight practice. And I'm doing that because...you'll see why when I describe it so. So, what we do is just, I'm going to give you a kind of a longer version that you can do, start out 30 seconds, you can build up to 12 minutes a day. And then I'm going to give a very short version that we can do multiple times a day when we're out and about in the world doing our thing. So, this, find your flashlight practice, essentially, what you do is try to find some quiet moments, dedicate them, you know, I try to yoke it to something I know is part of my daily routine. So, either right after I brush my teeth in the morning, or if there's some time between that, and maybe having my morning cup of coffee, trying to get the time in so I don't have to decide when to do it, it's yoked to something I know I'm probably going to do. Well, I know I'm going to do every single day, no matter what. And then finding a quiet spot. You know, starting out doing in a quiet spot is just supportive.

And what we're going to do for this short practice, and like I said, start-up really, really slow, 30 seconds to a minute. We're going to just, first of all, sit and notice ourselves breathing, just that you're breathing. We've been breathing this whole time, but we now we are gonna just hit that floodlight and just sit here acknowledging, noticing right now, in this moment, I'm breathing. And then we're going to check into something that's kind of vivid about the breath. What's prominent? Is it the coolness maybe on my nostrils, or, I don't know, maybe my chest moving up and down? Whatever feels kind of more salient, more vivid in your experience of breathing, kind of cue into that. And then the goal for the practice is to take your flashlight of attention and shine it bright right on those prominent breath-related sensations. That's where you're going to keep your attention. That's what the exercise is. So, you're going to stay focused on breath-related sensations, and just breathe normally, you're not controlling your breath. And then the next moment, or whenever it happens, notice where your flashlight is. Is it still on breath-related sensations or has it gone off somewhere else?

And, you know, these could be really subtle little trips we take like, "Oh, I just have to remember I have to add this to my shopping list," or, "Gosh, I forgot that I had to do that other task," or, "Wasn't that a weird conversation I had with so and so." We do this all the time, that mental time travel. So we ask ourselves, you know, where we're focusing, that's the task. Second instruction after we focus is notice, where is the mind right now? Is it where I'm supposed to, for this period of time? I've committed to keeping my flashlight on breath-related sensations. So, focus, notice, and then if we find that our flashlight is not where we want it to be, redirect. And that seems simple enough, focus, notice, redirect, but the really cool part about it is we're actually in that short practice exercising all three of those systems of attention. We're actually pointing to the flashlight that's engaging that system, we're keeping the floodlight active and engaged to know where attention is, and then we're using the juggler executive control to check in with our goals and get it back on track if we're not.

And doing this over and over again, is really, as many of my military colleagues refer to it sort of like a push-up for the mind. We're exercising all three of these systems. And we're not doing this to be some kind of Olympic-level breath followers, I mean, we're not... the breath is just a handy target that we always have with us. We're doing it so that no matter what we're doing, we have better access to that flashlight or better access to knowledge of where our mind is in any moment, and better ability to control our behavior in our mind so that we can accomplish our goals, even know what our goals are. So that one I would say is a really good handy practice to do. And, you know, more detailed instructions I've provided in my book, but I just think that keeping that in mind will make it clear why mindfulness, and that, frankly, this mindfulness of breathing practice is so powerful and helpful.

Katie: And I know I appreciate and I would guess a lot of moms do as well that it's only 12 minutes a day, I appreciate your book, for this reason, I'll make sure that's linked in the show notes, too. And what's interesting, and now 500 guests on this podcast, I would say, at least a third, maybe close to half of them mentioned meditation or mindfulness as being one of the most important things in their lives. And these are very busy people. And so this seems like an important recurring theme. And it seems like doing this kind of a practice is also something we can teach our kids from a young age to help them develop better attention skills as they get older.

This episode is brought to you by Paleovalley, a family run company whose products I've loved for years. My family loves many of their products and their beef sticks and Essential C are daily staples at our house, but today, I wanted to specifically mention another of their products that I've been loving lately, which is their apple cider vinegar supplement. Apple cider vinegar is great because it can support: Breaking down proteins (amino acids) for better absorption, improving the blood sugar response supporting with satiety and cravings. The main ingredient Acetic Acid supports in extracting nutrients from food for better use by the body. They combine Apple Cider Vinegar with other healing spices (turmeric, ginger, cinnamon and lemon) for added benefits for digestion. Studies also show that ACV can be helpful in increasing stomach acid to better absorb food, in supporting weight loss by helping you eat less, help with muscle cramps and improve glucose and insulin response and much more. But the taste is pretty strong, which is why their capsules are so great! The added spices give it an extra digestive and immune kick and I find this one especially helpful this time of year when I'm trying to shed the few extra pounds from the holidays. Check out this ACV supplement and all of their products at paleovalley.com/mama and use code mama15 at checkout for 15% off your order!

This podcast is brought to you by Sunday for Dogs... a new staple in our house that the newest family members could tell you the most about if they could talk. Lollipop and Hemingway, our two family dogs are loving this food and get so excited when it's time to eat now! When we got them, I knew I didn't want to feed them overly processed kibble and homemade options were a lot of work! And Sunday has been my solution... it's the first (and only) human-grade, air-dried dog food. Combining the nutrition and taste of all-natural, human-grade foods, with the ease of a zero-prep, ready-to-eat formula, Sundays is the best way to feed your best friend. Sundays is easier for pet owners to manage than refrigerated human-grade dog food brands. No fridge, prep, or clean-up. Unlike most human-grade dog foods, Sundays is gently air-dried and ready-to-eat, versus those other brands that are cooked and frozen instead. It's as simple as scoop, serve and watch your pup devour it. In a blind taste test, Sundays outperformed leading competitors 40-0. No artificial binders,

synthetic additives, or general garbage. All of Sundays' ingredients are easy to pronounce (okay, except quinoa), and healthy for dogs to eat. We've worked out a special deal for our listeners. Receive 35% off your first order by going to sundaysfordogs.com/WELLNESSMAMA or use code WELLNESSMAMA at checkout.

Can you talk a little bit more about the science of mindfulness, and why all of these high achievers named this as one of the most important factors in their lives?

Dr. Amishi: Yes, absolutely. And that's really heartening to hear that you're hearing this consistently. And I happen to study mindfulness in my lab, from the brain science perspective. And really, we consider it a cognitive training tool. And as you mentioned, we construct this training tool and offer it to children, pretty young children, actually, and all the way up to adults. And even as we age, this can be a helpful thing. What we're finding from the brain science perspective is that those three systems of attention that I mentioned are able to transform in terms of their structure and their functioning so that they look healthier. And it's not just that the systems themselves work better, it's that their coordination, in terms of the brain networks kind of talking to each other and holding hands is happening more fluidly. So, there are many, many reasons that we're now seeing that mindfulness training can be helpful. Because all those things that attention fuels is also benefited. So we know, for example, that when people practice mindfulness training, not only does their attention and the brain responses tied attention look healthier, but their mood is boosted. Their performance is boosted and their relationships seem to be of higher quality.

And now we're at the point, not a study or two, we've got thousands of studies, what we call meta-analyses, where we're aggregating across, you know, could be dozens and maybe even hundreds of studies. We're now to the point we're actually doing meta-analyses or meta-analyses. So the research is getting stronger and stronger. But, like you said, the key is that we practice because, unlike many types of knowledge we can gain, mindfulness is much more like physical exercise. We benefit, but only if we do it. It's not about understanding it, understanding is not enough. In the same way, understanding physical activity is not enough, you know, we don't get better cardiovascular health by knowing that cardiovascular health is a good thing, we have to actually do it. So, that's the hard part, I would say. And that's what my lab is sort of been devoted to is well, how do we get this to be minimum in terms of time commitment, but not so short that's not beneficial. So, over these years, we've been doing study after study to kind of hone that prescription. And, yes, about 12 minutes a day, 3 to 5 days a week, I would say, shoot for, can be very, very helpful to protect against stress-related decline in attention, protect against mood degradation, and actually even boost mood in many cases, and reduce that experience of stress.

So, I hope that that kind of answers the question that this is now coming to be, not just a nice-to-have but a must-have to keep ourselves healthy. And when it comes to children, I would say, you know, the really fun part, I remember early days, I actually learned about mindfulness kind of because of my role as a mother and as a parent. I had almost a three-year-old at that point in a very busy part of my life. I had just started my own lab and my husband was in grad school, we had bought a 100-year-old fixer-upper. All these great things that, you know, we want in our lives, but all of them happening at once really kind of depleted me and I was in this very ironic moment where I study attention, but I could not grab a hold of my own attention. So mindfulness

ended up showing up in my life, just as something I needed to try to see if it might help with my own slipping away of attention. And once I found that, in the case study of one it was beneficial. I got really curious to kind of bring the rigor of science to investigating it. And, yes, objectively, you know what? It's not me and it's not my own subjective experience, but when it's other people, we use objective lab-based measures, and even brain imaging, we see these beneficial effects.

The natural inclinations of parents, when we find something to be helpful wanting to bring it to our children. And yeah, absolutely, as long as the ways we offer mindfulness training are developmentally appropriate based on the age of the children, very, very helpful thing to do. And, you know, someone has just mentioned one practice that I love, like, so there's so many different fun things we can do with kids, but the one that we probably don't exercise very much in children is actually one thing that has to do with be the floodlight or meta-awareness. Sort of watching what's happening in the mind, and what's happening in the present moment experience, with kind of a quietness to it. Children, I think, are very good at being in the present moment, but oftentimes, aren't kind of watching what is happening in the present moment in that same way. So, maybe I'll offer one practice that can be fun to do even with a group of children. You mentioned you have six, so I figured maybe they can work together to do kind of a fun practice. But before I mention it, was there anything else about bringing it to children that you wanted me to discuss, Katie?

Katie: I think that's perfect. I'm excited to hear this one.

Dr. Amishi: Okay. So, the first thing is that silence and stillness practices with children are probably not the easiest thing to do, we want to do active practices. So, even something like the mindfulness of breathing, you know, a dear colleague of mine, Susan Kaiser Greenland, she has a whole series of mindful games that she offers, but she starts with really young kids, toddlers. And instead of just having them pay attention to the breath, she'll ask them to get a soft toy, some kind of, you know, little tiny bear cuddly thing that they put on their stomachs, they lay down and they just watch the animal, the little soft toy go up and down. And they're kind of enjoying seeing that, but what they're doing in that moment is paying attention to their body and breathing. So there's sort of this active quality to it. The practice I was going to mention regarding the floodlight is actually a stillness practice. So, what you do is you can get a small group of kids, you can even do this with adults if you want. It's actually fun to do if you mix some adults in there too. And you have to find a bell, like just a regular old bell, something that can ring really, really easily so that if it moved even slightly, it would go, ding, ding, you know, it'll ring.

And the little activity is everybody sits in a circle, and the bigger the circle, the better. And it's sort of like we're working together, but each person has a specific responsibility. The practice is, let's pay attention to the sound, the soundscape, if you will. And our job is going to be very gently and delicately we're going to pass this bell around from one person to the next and see if we can make it all the way around the circle without the bell ringing once. Just quietly. So they're listening for the quiet. And then, of course, at the end when we do that, we get to ring the bell and everybody can ring it as loud as they want, which is kind of fun. But it's so fun to see children, you know, with the carefulness of their movement and the carefulness of noticing sound, just really listening in and leaning into it, it's such a great activity to do that. It's in some ways, honing in them, this

notion of paying attention in a kind of collective and beneficial way, but there's still stillness and quietness involved.

Katie: I love that idea. That would be a fun one, and I'm going to try for sure with my kids. And you also a couple minutes ago mentioned the word resilience. And I've seen some of the research and also articles that talk about things like resilience and grit in kids and how those correlate with success later in life. And it makes me curious, both in kids and in ourselves, if there are ways for us to cultivate resilience, maybe specifically related to attention. Because I feel like as a mom even, at like, 4:00 p.m. after getting questions all day is when I feel my resilience going down. Are there ways we can improve that?

Dr. Amishi: Yeah, absolutely. So, here's the thing, you know, what is resilience? Typically, we think of it as this capacity to bounce back after challenge or adversity. What I'm talking about with mindfulness training though, I would even characterize as presilience. So what can we do to maintain our capacity, not having to regain the efforts and loss but just keep it steady? And this is where practices like the one we were describing, just even doing a little pick me up practice. And I mentioned, you know, that even beyond during the 30 seconds up to 12 minutes, mindfulness practice, the mindfulness of breathing practices, or as I call the find your flashlight practice, there's another one we can do often. And, you know, let's say you're coming back from a day of meetings or just a day of work, and you now have the evening to contend with, probably, you know, helping out with getting children sorted with their various projects and homework and maybe carting them around to various activities or whatever it is, getting dinner ready, whatever it is, planning for next day.

But you need that kind of extra boost in the afternoon to kind of bring a fresher of your mind to it. That's a little moment of resilience, but we can do it by even not waiting till we feel totally depleted. So, this is kind of a mini practice, something we call sort of a on-demand practice. We can do it as many times as you want, it doesn't take much time at all. And I always like to use the external environment to cue me in to when I can do this. So, this particular practice is called a STOP practice. And I don't know if you've maybe done it on your podcast before, but I'll just mention that. So, STOP is an acronym, and when do we do it? Well, anytime we're stopped. It could be stopping at a stop sign, stopping at a crosswalk, stopping and waiting for the elevator, waiting at line anywhere, or waiting anywhere, it's a great place to do it. So, STOP, the acronym it's just STOP, meaning stop. Whatever your mind is doing, whatever your body is doing, physically, just halt.

The next letter, T, take a breath. So one conscious breath aware that you're really breathing right now, just like we do during the practice. Just inhale, exhale, an awareness of doing so. So, that's S and T. O is observe. After we've taken that one kind of breath, just what is happening around me right now? Taking it in. Not a story about it, but just letting our eyes, sounds, whatever it is, take it in. And even in our mind, you know, I feel tension right now, I feel tightness in my body, I feel a little anticipation, whatever it is, we're just kind of collecting the data, observing what's happening in that moment. And then P, proceed. Move on our way. So, S-T-O-P, STOP practice is so helpful, it's like a mini recharge. Because... and know, this goes back to why I named the other practice the find your flashlight practice. Oftentimes, we can feel scattered or pulled, it's because we don't really feel like we're owning our own attention in that moment. So, to me, finding where our

flashlight is, is such a powerful way to kind of get back in control of our own mind. And the STOP practice is another way to do that.

Katie: I love that. I made notes in the show notes for you guys listening. And, of course, I'll link to your website as well, I know you have a lot there. And I want to make sure we also touch on your book, which I mentioned will be linked at wellnessmama.fm for you guys listening. But talk about the concept of developing a peak mind, and what are some of the ways we can do that? I'm sure we've touched on some of them already, but I would just love for you to talk about the book and define that concept a little.

Dr. Amishi: Yeah, yeah, you know, it's kind of a funny play on words. So, usually, when we use that word peak, we're thinking of like peak experience, you know, it's sort of singular, it's like, unusual, like, I was thinking of, like, you know, accessory poster like woman on mountain top, like she's at her peak moment. But I liked the idea of playing with that concept because what I mean when I say peak mind is almost the opposite. It's having a mind that has full access to all of its attentional capacities. And we can cultivate that, we can train for that. And with that full mind, we can stave off distractibility, and we can actually use all of these brain systems of attention as we've been talking about to accomplish our goals, to meet our challenges, and feel fulfilled. So, that's sort of the promise of the peak mind. It's not a moment in time, but it's something we get to have and embody that can benefit us. And then what I layout in the book is essentially a review of our research that has really been devoted to finding best practices and time-efficient practices for busy stressed-out professionals and made them available so that all of us can benefit from them.

And the key is that we have to kind of reframe the way we think about the mind. You know, we're at the point in our culture right now where we understand that the body needs physical activity. We know it for ourselves, we know it for our children, but we don't really think of the mind in the same way as needing mental exercise every day to stay fit, psychologically healthy. But it does, frankly. That's what we're noticing. What we're noticing in terms of the brain science is that if we just let the mind do what it will under stressful circumstances, which is, frankly, many of the periods of our lives, it will decline, it will degrade, it will diminish in its functioning, especially its attentional functioning, as we discussed that fuels all these other things. So we can do something about it, we can train the mind so that it works better, and it works more efficiently so that we're better able to meet the challenges of our lives. And that's what I mean when I say peak mind.

Katie: I love it. Well, like I said, I recommend the book, it's a fascinating read. And I think it's really helpful for certainly professionals but also for parents because I think a lot of these topics are very top of mind with our children as well. And speaking of books, a question I love to ask at the end of interviews is if there's a book or a number of books beside your own that have had a profound impact on your life, and if so, what they are and why?

Dr. Amishi: Oh, yes, you know, for me, many different kinds of things, but I would say it kind of... I'm a neuroscientist, so my interest in this topic that we've been talking about has really been on understanding the science, finding solutions, evidence-based for solutions that I would recommend to other people. But I really

think that getting the experiential, and getting the kind of poetic is also really, really helpful. So if you're one of those people that likes to get inspired through poetry, I would strongly recommend "The Essential Rumi." He happens to be a wonderful poet from way, way, way back when. And it can really bring up a lot of beautiful imagery regarding what it means to be present. Another one of my favorite books, actually, anything she writes I love, but two authors. One is Pema Chödrön, who is actually a Buddhist nun, an American, or sorry, maybe she's Canadian, yeah, woman who ended up finding mindfulness and meditation practice, and then writes just about the kind of realities of how to really incorporate a lot of these learnings into our lives and the challenges that we meet.

And then another great book is called "The Force of Kindness" by Sharon Salzberg. So, these are very strong powerful women. And then, of course, there's Rumi, who's a man but his poetry is wonderful. And it just kind of fills me up in a different way. You know, most of the time, in my lab I'm looking at charts and graphs and brain images and talking about statistics, and this kind of confuses and inspires my mind to want to keep pursuing this as my own growth and my own learning.

Katie: I love those recommendations. I'll make sure those are in the show notes as well. I've become a big fan of Rumi lately as well, but the others are new recommendations for me, so I'll make sure to pick them up. And I know how busy you are and that you're traveling right now. Thank you so much for taking the time and breaking this all down so clearly today. And like I said, I'll put links in the show notes for you guys listening so you can springboard into more of your work and keep learning from you. So, thank you.

Dr. Amishi: Thank you so much, Katie. I love the podcast, you always have such informative stuff, so please keep going. It's helping a lot of people, including me.

Katie: Oh, thank you. And, thanks as always to all of you for listening and sharing your most valuable resources including your attention with us today. We're both so grateful that you did and I hope that you will join me again on the next episode of "The Wellness Mama Podcast."

If you're enjoying these interviews, would you please take two minutes to leave a rating or review on iTunes for me? Doing this helps more people to find the podcast, which means even more moms and families could benefit from the information. I really appreciate your time, and thanks as always for listening.