



Speaker 1: Bulletproof Radio. A state of high performance.

Dave Asprey: Today's episode is a lot of fun. And you're gonna wanna listen through all the way to the end, because you'll hear everything you might wanna know about daydreaming, about doodling, about strategies that can work in the office or in a classroom, or even with young kids, in order to encourage ingenuity and creativity, and some of those 'soft' mind skills that you might not expect from a guy whose very, very well studied in neuroscience and actually lectures at Harvard. So enjoy the conversation. It's gonna be worth your time.

You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is that transparent solar tech could be the future of energy. They just come out with some see-through solar materials that you can stick on your window, which means that every glass building could filter out some lights and put as much power into the power grid as rooftop solar units, which is amazing.

There's just one problem. We never think about second-order effects here. They can tune these materials to pick up just ultra violet and near infrared wave lengths of light and turn those into electricity. But your body requires ultra violent and near infrared light. What we're thinking about doing, in order to save electricity is we're thinking about filtering out light that your body needs, in order to put it into your iPhone, or wherever the heck else you're gonna put that electricity.

I would also say we've seen weird electromagnetic frequencies in houses that have solar panels that require specific electrical filters in order to filter this out. If you've heard a few of the other episodes of Bulletproof Radio, we now understand that electromagnetic frequencies from electrical devices affect the voltage-gated calcium channels in cells and cause calcium to go into your cells, which causes inflammation, which is one of the reasons that it's not about cooking your brain with your phone, it's about actually changing the way your brain makes energy with your phone.

I love the idea of transparent solar panels, but maybe we should look at the net system effects instead of just whether we're gonna save a nickel on our lighting, because you are powered by light and food and air, and that's the way it works.

Alright. Before we get into today's show, check out the Bulletproof Coffee Variety Pack. A lot of people don't know that we have four different types of Bulletproof coffee, and we put together the 3 Roast Variety Pack, which is The Mentalist, which is our medium dark roast, the one that I just had right after lunch. We have the Original Roast, which is a lighter roast, and we've got the French Kick Dark Roast, which is dark, but not charcoal black and disgusting, like a lot of dark roasts.

We tuned each of these flavors with the guy who trains the judges for the Cup of Excellence, which is like the Olympics of coffee. So far, I absolutely love these coffees, and of course, they're all Certified Clean Coffee, independently lab tested for 27 toxins that I've identified that come from the fermentation process in coffee. They're all single origin coffee grown at high altitudes, and they're all Rainforest Alliance Certified, which is better than organic because, well, we know what our growers do, but more importantly we're taking care of the environment, including the economic environment around where the coffee's grown.

It's not enough to just say it's organic, it's also useful to know that the people who pick the coffee and grow the coffee are taking care of economically. Of course, it's all fresh. If you like this stuff, you can tweet @bpnutrition, let me know, which one you love best. Just go on over to Bulletproof.com and try all three of these at once, save a little bit of money, but more importantly be able to have all the different kinds of coffee flavors you love, and feel great every time you drink it.

Alright. On to today's episode. Today's guest is Dr Srin Pillay. He runs the NeuroBusiness Group, which uses brain science to help leaders further their personal and business goals. He's one of the pioneers in applying neuroscience in brain imagery in the business world, and just wrote a book that came out called Tinker Dabble Doodle Try, Unlock the Power of the Unfocused Mind. And that's what we're gonna talk about today, is why being too focused might actually be bad for you. Welcome to the show, Dr Pillay.

Dr Srin Pillay: Thanks so much for having me, Dave. It's lovely to be on.

Dave Asprey: We've had a chance to talk at a few different groups like JJ Virgin's Mastermind. I think probably also the Joe Polish group. You remember Genius Network?

Dr Srin Pillay: I think it was Michael Fishman.

Dave Asprey: Ah. Michael Fishman's group, Consumer Health Summit. So for people listening, there's a few groups where people who are working to move the agenda for health and wellness and fitness forward, where we get together and we talk about what works, and we get a chance to meet each other, and Srin and I have hung out quite a few times over the years at these events, and I've been wanting to have him on the show for a while, and this was a good excuse, because his new book is really cool, and it's also something you probably haven't heard about. What made you write a book about being unfocused? For God's sake, hold on, I gotta check Facebook. Oh, I'm sorry. What were you saying?

Dr Srin Pillay: Well, you know, there are a couple of different things. I mean, most literally, it was that my agent whose I think our agent, Celeste, actually sat down with me for an hour, and she said, "I just want you to talk nonstop, so I can just figure

out where your mind is." So I did, and she said, "Tell me everything that you're doing." And I was like, "Well, you know, I'm doing psychiatry. I'm doing executive coaching. I'm working with people in organizations. I'm also doing some biotechnology analyses. And I have three sort of small tech startups, and I'm also a musician, and I'm writing a musical."

And she was like, "And all of these things are moving along and progressing?" And I said, "Yeah." She said, "Well, it sounds to me like you're in a good position to talk to people about the specific kind of unfocus that you have. And maybe there's something about that." So that was the literal reason, but from my clinical practice and my coaching practice, what I had noticed over the years is that there was a lot of preaching about focus, like everyone was like, "If you're focused, you'll be successful. If you focus on what you need to do, you'll be ..."

And you know, to a certain extent, I'm a huge fan of focus, so I felt like, well, you know, this should work out. People have a strategy. They're focused. They're executing that strategy. They should be able to get what they want in life. But by and large, I found that the majority of people never really reach their goals. The people who reach their goals did have focus, but the majority of people who focused didn't reach their goals.

And so I started to think about that a little bit more, and I thought what could be going wrong in the brains of these people who apparently are focused, but they're not getting to where they wanna get to. Some of them want to have different kinds of relationships. Some of them want to make more money. Some of them want more meaning and purpose. And it turns out that focus is in fact absolutely essential if you wanna get stuff done. You know, that's the reason we have to do lists, and we remind calendar reminders, because we have to get stuff done.

But, your brain can actually have just too much focus. And so what I wanted to do, was to create a book that would help people understand how it is they could build unfocus into their lives, once they understood some of the problems associated with focus. And then, based on that how they could begin to sort of test this out in their own lives, so they could get to their goals.

That was really, I think, the motivation for the book, and I think as we talk, you'll see there are more unconscious motivations as well. I think the fact that I'm not a huge fan of conventional psychological theories around, "Just be sensible, and you'll get to your goals," because I know so many people who are sensible. They don't get to their goals.

And there's so many theories around, well, keep your eye on the goal. But you see in so many examples, like tennis, for example. You know, when someone's hitting a ball and they're executing perfectly, the eye is not on a goal, it's on the ball. So I wanted to make distinctions for people like that, so they could begin to think about their lives differently.

Dave Asprey: And this doesn't come from a light background. You teach psychiatry at Harvard, right.

Dr Srinil Pillay: I do. And I studied brain imaging, brain blood flow for 17 years. So combining the study of brain blood flow with teaching psychiatry, and also having a clinic practice, I think sort of helped me feel comfortable about where I was at.

And I think one of the things I always say to people is I don't really believe in absolute truth. I both believe and don't believe what I'm saying. I think any researcher whose serious about their work, I think, will recognize that science is iterative. We're always renewing findings, so what I wanna provide for people is frameworks so they can test it in their unique lives in their unique ways. And I would say that distinguishes some of my recommendations from the general recommendations that are out there.

Dave Asprey: Well, let's talk about focus. I spent a lot of my early career ... I'll just say I was tortured by the amount of effort that it took me to focus. I mean, I'd bit my check, and I was like just dragging focus out in meetings, because frankly most meetings where ineffective and boring, and people talk really slow and like, "Seriously could we do something? Like, why are there 10 of us in this room? And there's crappy fluorescent lighting, and I just wanna eat some tacos."

And I think that's a really common thing. So I did manage to learn how to focus. And I found out later when I started doing a lot of neurofeedback and eventually opened my own neurofeedback group, our neurofeedback facility, I had excessive Theta brainwaves, that's that daydreamy state, especially when I was in visually stressful environments.

So I was like going off into daydream land, and so maybe that kind of focus was lacking for me. But you're saying that if I had been hyper-focused, that I maybe would have missed out on some of the other good stuff that I was doing. I was very successful in my career, even though I hated meetings. How do you get in the middle there? Or how do you switch modes?

Dr Srinil Pillay: So a couple of things. Let's first just try to take a look at why I have a problem with focus, right.

Dave Asprey: Okay.

Dr Srinil Pillay: I think focus, as I said, is super important. But most people live their lives going sort of focus, focus, focus, fatigue.

Dave Asprey: Mm.

Dr Srinil Pillay: And that's sort of the general pattern of their days. And my thesis is that it's more effective for your brain to go focus, unfocus, focus, unfocus, focus,

unfocus, during the day, because then you're replenishing the energy. Here are a few problems with focus. The first is that focus depletes brain energy.

Dave Asprey: Yes.

Dr Srinii Pillay: A classic study that was done showed that there were two groups of people who watched a video. One group of people were asked to focus intensely on the video, and the other group of people were asked to just watch it as normal. And what they found was that afterwards when they asked them to solve a moral dilemma, and save people in a very difficult situation, the group that focused couldn't care less. And the group that watched it as normal started to try to figure it out. And then when they fed the group that focused, glucose, they started to care again.

Dave Asprey: Yes. Brain energy. I know the study. Okay. Cool.

Dr Srinii Pillay: And so the brain energy is important, and I think if we just think we can keep on focusing the whole day, and we don't realize we're depleting our brains of energy, we actually stop caring, and we even stop being able to focus effectively. So that's I think, the first sort of objection that I think people should consider.

I think the second, is that focus prevents you from seeing what's going on in the wings. You can be just like on your track, you can be like, "This is my career. This is my startup. This is what I'm doing," and you can completely ignore the competition. You know, classic example, An Wang, who had the word processor, and he was like revolutionary, everybody was like, "What is this new thing? It's kind of amazing."

And he then got into this issue with IBM, and didn't trust them. And so, while they were releasing the PC, which he could easily have released, he was focusing on word processor two. And by focusing on word processor two, it was going through life with blinkers on. And he wasn't seeing what was happening on the periphery, and as a result he became bankrupt and lost his business.

So focus may be great if you're really trying to get deeply into a subject, but if it means that you're going through life with blinkers on, and you don't know what's going on in the periphery, it can really have tremendously negative consequences for your life.

The third is that if you focus with your nose to the ground, to the grindstone, essentially you are not really looking at what's happening in the future. So you could be thinking like, you know, my niece for example, called me, she said, "I wanna let you know I got a 100% on my accounting test," and I was like, "That's great. But do you realize that you're in a field that's becoming extinct?"

That very soon robots are gonna be doing what you're doing. Maybe you wanna take a leadership course, so you can learn how to run a company of robots that are doing accounting. So if she's just focused on the test, but she's not focused on the future, she's missing out on what the upcoming patterns are.

The fourth thing is that focus doesn't allow you to make connections. So Gillette, for example, was a company that had a battery division, a toothbrush division, and an appliance division. But they were not first to market with the electric toothbrush, because nobody was talking across the company. Each division was just focused on what it was doing. So there was no connection and no creativity.

And finally, focus also prevents self connection, and that's because when you're super focused your brain operates a little bit like a fork, so it like picks up all the parts of your identity that are like your LinkedIn profile. You know, went to school here, did that. But we all know our LinkedIn profiles don't really describe who we are as people.

And when you unfocus, metaphorically your brain invites a spoon to the table. So all of a sudden, the delicious melange of flavors of your identity, the scent of your grandmother, is invited to the table. In addition to that, it invites chopsticks, so they make connections across the brain, and it also invites a toothpick or marrow spoon, depending on what you like, which digs into the nooks and crannies of your brain, and picks up fragments of memories that are puzzle pieces, that can help you put entire narratives together and solve problems.

So, because focus drains your energy, makes you go through life with blinkers on, makes you not anticipate the future, prevents you from making connections, and also lessens your sense of self. Focus on its own is really not enough for success. We need to figure out how to activate the unfocused circuits in the brain, and it turns out, there is such a circuit.

And if you look at the brain, the brain occupies just 2% of the body's volume, but at rest, when you're doing nothing, it uses 20% of the body's energy. And effort just tacks on another 5%. So what's this busy brain doing when you're doing nothing? And how can you optimize what it's doing when you're doing nothing? And that's what Tinker Dabble Doodle Try is about.

Dave Asprey: There's an interesting study from Oxford a while back. They was looking at active mode versus default mode or passive mode in the brain, which I think is what you're talking about here.

Dr Srin Pillay: That's right.

Dave Asprey: And for years, we believed that either you're focused in active mode, or like a light switch, you were in passive mode. And these guys figured out, "Oh. It's a

sliding switch." It's actually like a dimmer. So you could be in both. In fact, you're always in both at the same time. It's a question of degree.

And a while back, one of my portfolio companies made software called Neuro Minor, that would train you to remember what happened when you are in this kind of unfocused land, because a lot of times, it's like you said, its fragments, it's just little stuff sprinkled around out there, and I found a lot of benefits from just training my memory and awareness to know what I was doing, when I was not doing anything.

And I think a lot of us lose that. How do you recommend that people, if they do allow themselves to daydream, or they go for a ride in their car, God forbid, without listening to Bulletproof Radio? Or it's actually quiet and the radio's not on, and they're not on the phone and they're like, "What am I gonna think about?" And after you get tired of being mad at people cutting you off in traffic, your mind starts to wander, and something happens, but then you don't write it down, you forget it. How do we benefit more from that unfocused mode?

Dr Srini Pillay: So that's what the book's about. It's basically filled with different techniques of unfocus that you can use. But let's start with the specific example you're asking about, which is daydreaming. So daydreaming was actually studied extensively in the 1950s by a guy named Jerome Singer, who found out that certain types of daydreaming as you pointed out were not helpful.

So like, slipping into a daydream, not that helpful. Now, ruminating about the prior night's indiscretions, you know, like maybe you drank too much, and you said stuff you shouldn't have said. The next day you're just worried about it the whole day. That kind of daydreaming is not helpful.

Dave Asprey: Yeah.

Dr Srini Pillay: But there is a type of daydreaming that can increase your creativity. It can stop habit formation. And it can also re-energize your brain. And this type of daydreaming is called positive constructive daydreaming, so PCD. So, what's positive constructive daydreaming and how can people use it in their lives?

Positive constructive daydreaming. So first of all, we all spend 46.9% of our days, daydreaming. So when people say, "Oh. I don't have time to practice this," I'm like, you actually do. You spend close to half of your day, daydreaming. So why not learn to daydream effectively?

The first thing is the recommendation. You don't have to plan it, but the first thing is, plan out a 15-minute segment in your day, when you can do this. The second thing, is when you are daydreaming, you need to be doing something low-key. It doesn't work if you're just sitting at your desk and staring out. It actually works best if you're knitting, or gardening or walking.

And the third thing is Singer found that this was most effective if you start with a positive wishful and playful image. So something like, running through the woods with your dogs, or lying on a yacht. Or whatever for you feels positive and wishful and playful. Those three things. Planning it. Being engaged in a low-key activity. And using some kind of positive wishful or playful imagery can get you started.

And what people don't recognize as you implied, is that when the default mode network ... You know, we used to think of this as the do mostly nothing network, the DMN. When in fact, it actually does much more than nothing. When you start to do this, that's when this unfocus network, the default mode network actually starts to bring different puzzle pieces together, it creates these kinds of Eureka experiences. Unjumbles information, re-energizes your brain, and allows you to make these connections.

And when you do, this particular kind of daydreaming can increase your creativity. And it actually allows you to re-energize your brain. I always recommend to people that if you feel like, "Oh man. This is crazy. Like, how can I actually start daydreaming in the middle of the day?" Recognize you're spending more than half of your day doing this. Secondly, after lunch, middle of the afternoon, for some people it's mid-morning, we get these natural slumps. So why not do stuff that's actually energizing for your brain.

In the book I sort of describe more details about positive constructive daydreaming, and how many people have actually had realizations like this. Like in psychotherapy, for example, we use a technique called reverie, where people will be just associating, they'll be talking about what they did in the morning, they had a sandwich, and all of a sudden stuff comes together, because all these fragments of memory come together and the form these puzzle pieces.

The problem with people who focus continuously is no matter how hard they work, they're not giving their brains time to create this creative eureka, or unusual experience, to synthesize information. And the brain needs time to synthesize information. And that's the reason that it's important to daydream. But there are a lot of other techniques, which I'm happy to go into, unless you have some questions about what I've said so far.

Dave Asprey:

I wanted to reiterate how important that was, that over the last year the last three months, I got to the point where my calendar got so full during the day, that I was literally back-to-back meetings. And I'd sort of requested with the people who help me schedule, I'm like, "I need a little bit of just downtime where I'm not doing anything," but it somehow got deprioritized without me really noticing. And it wasn't really a choice that I'd made.

And because I'm a dad, because I work from home when I'm not traveling, it's like the second I walk out of my office, it's like time to go, be constantly interrupted by kids, which is fun, but it's also not a time for daydreaming because it doesn't matter what you try and do, you're gonna get interrupted.

And then at center, and it's like one thing after the other, after the other, to the point where I wasn't getting any of that for probably about almost a year, of just like no time to do that. And then it's time for bed and you're reading. And it did take a toll. It's hard to quantify it, though. But sometimes the really good ideas, like, it takes time to form them, and they weren't happening.

Dr Srini Pillay: Yeah.

Dave Asprey: Do we need to actually like schedule a time on or calendar to daydream? Is that kind of a recommendation you'd make?

Dr Srini Pillay: Yes. In fact, I have a thing called a Tinker table that comes with the book if people request it, which is a desk top App where people can automatically choose how much time, how many times a day for as long as they want to, because the paradox of unfocus is that if you don't schedule unfocus into your day, you'll never have the time if you're an ambitious person to actually get anything done.

And just to make a point, and to add to what you said. When I was at medical school in my second year, I worked incredibly hard, and I did really poorly in my second year, because I would fall asleep with bones all over my face, and I'd get up in the middle of the evening and I was be like, "Oh my God. I'm focusing. I'm focusing." And then in my third year, I just suddenly was like, you know what, I'm working in 45-minute segments. I'm taking time off. I'm playing sport. I'm going to parties. I'm coming back, I'm focusing on my work, and I immediately ... My grades improved to the point that I got to the top of the class, but I built what those particular unfocused things ...

Before that I was just exhausting myself. And I think as an entrepreneur now, I can really relate to what you're saying, because I sometimes get caught up in this whole like wheel of activity, like, "I gotta work, I gotta work. Action matters. Action matters." And suddenly I might remember that the people who do the most don't necessarily do the best. I think remembering that, and scheduling that in. I mean, there are a couple of other things as well, which may be counter-intuitive, that I'll mention upfront.

Dave Asprey: Mm-hmm (affirmative).

Dr Srini Pillay: One is napping. Studies show that 5 to 15 minutes of napping can give you 1 to 3 hours more of clarity. And if you wanna be more creative, you need 90 minutes, but 90 minutes is a little impractical for the average working person. And studies also show that napping too much can place a strain on your heart, because it changes your sleep cycle, and so that eventually impacts your heart.

I would say a couple of times a week, 5 to 15 minutes of napping. Everybody knows what its like after lunch or in the middle of the afternoon, you really

dragging. So for a lot of people who are dragging in that way, why not nap for 5 to 15 minutes, and then that'll give you 1 to 3 hours of clarity.

The third thing, which I think is counter-intuitive is doodling, just scribbling on a piece of paper. You know how at school people are always like, "Pay attention!" Like, "Stop scribbling!" Well, it turns out Jackie Andrade and her colleagues did a study where they had people listen to a long rambling telephone message, and what they found was that the group that doodled versus the group that listened intently had 29% better memory.

Doodling connects you with your unconscious. It activates memories, and it allows you to actually eventually learn more. And then, another technique that I mention in the book, it's called psychological halloweenism, where they took two groups of people. A standardized group of people who were rigid librarians, they behaved like rigid librarians, and a group of people who like eccentric poets. They just embodied that identity.

And then they gave them a creative problem. The creative problem was like, I'm gonna give you an object, like a brick, and I want you to come up with as many uses as possible. What they found was that the group that embodied the identity of an eccentric poet was statistically significantly more creative than the group that embodied the identity of a rigid librarian.

I had a funny example of this come up recently. I ran a workshop for the climate group of a non-profit ... And they were very sort of high-level, they wanted to solve climate problems, and I had them think like someone who was completely different from them. And one of the people actually put up his hand, was like, "Listen, I'm having trouble with this exercise." And I said, "How come?" He said, "Well, when you told me to think of some of the things the opposite of how I think, I thought of Donald Trump." I was like, "He doesn't think at all." "And now I can't think. I have no idea what to think."

And I said, "Well, what do you think Donald Trump would say?" He said, "Well, he'd probably say get the best person. Get the most important person." And so I said, "Well, who might that be?" And he said, "Well, Elon Musk, probably." And I said, "Well have you talked to Elon Musk?" And he said, "No." I said, "Would you like to talk to Elon Musk?" He said, "Sure." So we can learn from people we don't like, as well.

This other identity doesn't have to be someone you love. It just needs to be a different perspective, because often we are not able to solve problems in our lives because we're caught up in our own habit circuits. And we're not able to think outside the box, or outside of where we are. So I recommend to people, try this out on a date. Try it out at the dinner table with your kids. Try this out in general. Just say, "Tonight, what we're gonna do, we're gonna all embody a particular kind of personality." And just see how the difference in thinking and flow goes when you do that.

Dave Asprey: That sounds a lot like a smaller version of what Napoleon Hill recommended. He talked about having ... I think he called it a mental mastermind in his book, *Think and Grow Rich* or a counsel or something. And he basically said, every night before he goes to bed, or when he's "meditating", he would pick like the world leaders and interesting people and just have like a round table where he'd talk with them in his mind.

So we'd have Thomas Jefferson, and you know, Ben Franklin, and whoever the heck else he wanted there, and would sort of ask them questions, so he'd get their perspective back on himself. And what you've done, is you've changed that to say, why don't you just kind of put that mask on yourself ...

Dr Srin Pillay: That's right.

Dave Asprey: ... and you can do this, which is a really cool idea. And that's really the opposite of focus. It's very playful. Right. I'll do that tonight, but I'm afraid my kids will choose *Beavis and Butthead*. I knew I shouldn't have told them that they exist.

Dr Srin Pillay: I mean, it's really fun when you start to think like someone else, because you realize that it's just a completely different perspective. And to a certain extent, this relates to another recommendation that I make in the book, which is, so hobbies and thinking outside your primary field.

Aside from the fact that studies have shown that if you practice a hobby for (and this is just one recent studies, a lot more studies are needed), but if you practice a hobby for one hour every day, it reduces your chances of Alzheimer's disease. The studies also show that having a hobby can actually increase success in your primary profession, especially if you connect it.

For example, I love playing tennis. I'm sort of crazy about it. I'm not particularly good at it, but I love playing tennis. And so when I play tennis, I think about when I'm being offensive, defensive, when I'm too tight, too loose. And I apply it to the rest of my life and the rest of my thinking.

I think a good example of thinking outside the box is Einstein, who had a think tank and he followed the theories of Henri Poincare. And Poincare was an amazing mathematician, and had basically worked out the theory of relativity to the last two steps. And what Einstein said was ... He actually discussed this theory in his think tank. And rather than stopping where Poincare stopped, which is where evidence stopped in reality, Einstein asked, "What if?", used what I talk about a lot in the book, possibility thinking, and he was able to create the theory of relativity.

And at the same time, Picasso who also had a group of avant garde literati who he used to hang out with, and he studied the mathematical theories of Poincare. Now, you might ask, "Why is an artist talking about a math theory?"

Well, he just wanted to hear it for inspiration. And so, it's like when we listen to music, sometimes it just triggers a thought.

So what Picasso did, was, he studied the theories of Poincare, and found that the idea of the fourth dimension was very stimulating to him. And as a result of this, he painted one of his most famous paintings, the Demoiselles d'Avignon, and also launched cubist art. So by thinking outside the box, by not focusing only on your narrow field, you can start to make connections, and you can start to feel inspired.

And I think this was par for the course during the Renaissance. In the Industrial Revolution everybody started working in this machine-like way, and I think people lost their complexity. And if you ask me why people are less engaged at work, why they often feel fatigued at the end of the day, it's because they're not allowed to be themselves.

One of the things I think of with you, I mean, I always joke with you about this, but your mind is always in like 50 different directions, you're like, I'm interested in that. I'm interested in this coffee. I'm trying this substance. I'm trying this electricity. I mean, there's so many different things. It keeps you going, and it keeps you interested, and it keeps you engaged.

And the moment you reduce your complexity, then all of a sudden you become this sort of one-track mind. And life gets boring. I feel like life's too short to live an entire life that's boring. I think we're multi-dimensional, and that multi-dimensionality can actually improve our spiritual outcomes and give us a much greater sense of meaning and purpose in life.

Dave Asprey: They also talk about now how because we're living longer, and because the rate of change has gone up, that you should plan to have at least three careers before you either retire or die. And in my case, I think it might be more like 60 careers before I retire or die, just given that I'm planning to live to at least a 180 years. That's gotta be enough time, right?

But, if you have a hobby, like, say, oh coffee, you might find it turns into a career, or something like that, where if you don't have that you can be sort of stuck in a rut, and you wake up 20 years later saying, "I'm bored. And I really don't have anything else that I like that much." It's kind of a side benefit.

Dr Srin Pillay: Yes.

Dave Asprey: I wanted to go back to something you said about doodling, and get your neuroscientist take on this. I was never a particularly strong student when I was studying, mostly because I'm like, "Well, what would I do with all this knowledge?" Like, can I apply it somehow versus just sort of just be a little maybe too academic about it.

And when I was on my sixth year of my four year degree, given that I'd changed majors, I said, "I'm kind of done with this. I think I wanna get a job." So, I took semesters in one. And I also got a laptop for the first time. And now we all have smart phones and all it's really easy, but at the time, no one in my class had a computer.

It was, you know, \$5,000 and I had this thing. So I'd sit there in the back of the classroom, and I would play FreeCell. And FreeCell is basically a Solitaire game you can play on the screen, used to come for free with Windows. And I would switch and I'd take a note. I'd type my notes, which for the first time I could read them, because I have Homer Simpson handwriting. And I would type it in, and then I would go back to playing this game, which fills up your working memory.

And I got, I think, a 3.9 GPA that semester, even though I was taking two full course loads. And the other guy, who I think was definitely the smartest guy in the class, he was probably like 14 going through college or something. He'd sit next to me and we'd like play FreeCell together and it would piss off all the students in class, like, "How dare you play. It's disrespectful." And I'm like, "How dare you look at my screen," like, "That's disrespectful." And then they'd get mad and storm off, but I didn't really care, because my recall went through the roof. I could remember everything the teacher said, and my notes were so good. What the heck was going on with that?

Dr Srin Pillay:

I think a couple of different things. In general when your brain is ... when the default mode is activated, the unfocused circuit is activated, your brain is less like a stiff sponge. It's more like an absorbent sponge. Rather than being sort of stiff and just focused, when you're unfocused in that way your brain starts to absorb information in completely different ways.

And it also starts to make associations, which is a really strong way in which we learn, whereas if you have this one-track mind about, "I'm just gonna listen to that, and that alone," your brain is just collecting information, but short-term memory is like a cup, the dorsolateral prefrontal cortex. The facts are just gonna accumulate, and then spill over and you're not gonna have enough left in that cup.

But if you're taking in information, then you're making associations, and you're storing it in ways that you can remember. And you're associating it to particular things, it actually enhances your memory and it enhances the way in which you can integrate information as well.

One other point that what you said sort of sparked off for me, is the whole thing, that I feel like so many people in the world are misled about their futures because they base their identities on their academic success. And I feel like ingenuity is something you can access through unfocus and that, that I think what schools teach you is how to organize the information if you need it to be organized.

But if you wanna organize it yourself ... Every human being, I truly believe, is born with a wellspring of ingenuity. And I don't just mean this in an inspiring way. A classic example is the One Laptop a Child project, where people drop these laptops in rural Ethiopia thinking these kids have never technology before. You know, will they try to eat it? Will they sit on it? Like, what will they actually do with it?

And what they found was like, within a few days they found the on/off switch. And then, within a few weeks they were singing ABC songs. And within a couple of months they actually hacked Android. Now, these are kids who had never seen a computer before. All they had was curiosity and their own ingenuity. And I think we've wiped this off the surface of the earth with this kind of over-organized educational system.

And I think when we're adults, we actually forget that we have this ability to discover things. If you think about innate intelligence. Infants, when they lie in a scanner, if you show them one doll plus one doll equals three dolls, they'll stare at it, and the anterior cingulate, the conflict detector on the brain will go off. Like, "Something's wrong. Something's wrong."

And if you show them one doll plus one doll equals two dolls, they'll look at it and they'll look away. So even at that age, they may not have the operational ability, like to know arithmetic, but the brain can detect when something is wrong. This is what every entrepreneur wishes that he or she have. But you don't need to know all the reasons. You wanna have the instinct that something's not right here, and you wanna change course rapidly.

Well, if we get rid of these instincts and this ingenuity, we actually lose that. So I feel like what you said ... I think two kernels of truth that are really important, and they're a big piece of why I wrote this book.

One is that, I really feel like the world can be advanced if we stopped asking, "How do I do this?" And, "How do I do this?" You know, the paradox of the book, is that I give you these frameworks, but I don't think these work unless your ingenuity is involved in that. You've gotta do it your own way, in your own time, on your own terms.

And I think the second point is if on your own terms you find yourself wanting to be playful ... I mean, you know, the funny thing about play, and not all types of play have been studied in this way, but rough and tumble play, for example, actually improves attention. You might think, what are these people doing, they're goofing off, like what ...

Well, sometimes your attention actually improved because your memory is more absorbent, and you are making greater associations. I think a lot of people will say, "Well, come on then, what are you telling me to be distracted all day?" And I'm not. I'm saying, it's important to be focused, but also it's really

important to realize that focus will basically take you metaphorically through the roads of your mind. It's unfocus that will actually help you explore the fields of your mind.

Dave Asprey: What a great quote. I love that. Okay.

Dr Srin Pillay: And if you don't explore the field of your mind, then you're living your whole life never knowing what exists on the periphery of your own imagination. I just feel like it's really important to know yourself that fully.

Dave Asprey: I talk a lot about high intensity interval training, where like short bursts of intense effort generate good results, and it sounds almost as if you're talking about short bursts of intense focus followed by essentially rest and recovery, but in this case it's not just recovery, it's unfocus. That you're seeing better results in business leaders who do that, than ones who just stay focused. So the difference between running a marathon versus sprinting, resting, sprinting, resting. Is it a good analogy?

Dr Srin Pillay: Absolutely. Yeah. In fact, because some companies have even recognized that Google has napping pods. There are companies like Zappos also have napping pods. I've recently had consultations from people who have read the book, and have said, "We want you to help us rethink the architecture of our organization, like should be we doodle pads in from place to place? Should we be thinking about restructuring things so that we authorize the idea of unfocus?"

You know, even walking has some nuances associated with it. So studies show that you become more creative. I mean, you lose calories either way, but you become more creative if you walk outside rather than on a treadmill, and also if you walk in an unstructured path, a meandering path through the woods, you're much more likely to be creative than if you walk in a rectangle around the block.

So people wanna begin to encourage that kind of movement within their organizations, as well. I think the more we realize that people want the most out of their employees, but they don't want them to be the humans that they are. So they're like, "I want you to behave like a machine, then I want you to be replaced by a machine. And then I want you to wonder what you're doing."

I personally think that in a few years logical thinking is gonna become commoditized. I think robots are really good at being robots, but the one thing they're not good at is being human. And I think if we can learn to tap into our humanity and into the breadth of who we are, and really the depth of who we are, unfocus is the way that we can get to that place.

Dave Asprey: That's some powerful advice. I think there was some judgment that happens in companies. I used to have a manager when I was a sales engineer. And if I was doodling, he'd get so mad, he'd reach over and grab your pen or pencil. I'm like,

"You want me to just sit here and look at you while you're droning on about stuff that no one really cares about?"

And I still think that there's that judgment, sometimes from management and leadership, or even just from others, if you're in a meeting doodling, that clearly you're not paying attention. But it sounds like based on your research, that what's really going on is that people are forming connections, and that if someone's doodling in a meeting, it's not better or worse than taking notes. It's certainly better, though, than falling asleep, which was the other option.

Dr Srin Pillay:

Yeah. There are a bunch of US Presidents that actually have famous doodles, so people who have made some pretty important decisions have doodled. I would say that this judgment that you're talking about relates not just to doodling, but to unfocus in general. And this is a kind of philosophical stance that I take on that, which is, when people say to me like, "I get it. Like, I totally buy it. I get my best ideas in the shower. I need to rest my brain. Like, why wouldn't I believe that?"

Then I say to them, well ... But what they say is, "I feel guilty at work. Like, I feel bad if I'm ... People think I'm slacking off if I'm not paying attention." And if you look at this deeply, philosophically, a lot of people will be opposed to the idea of unfocus because we're peculiar creatures, right. On the one hand we say we want freedom, but as Kierkegaard pointed out, anxiety is the dizziness of freedom. We say we want freedom, but having freedom is like being without gravity in a vacuum.

It's not that easy. You still have to figure out how to live in that freedom. And I think for all of us, a lot of people surround themselves with balls and chains because they don't want to be away from gravity. And so, I would ask people to think about that philosophically a little bit more, because I think freedom is intimidating to us, and unfocus is scary, because the other piece of this, is that if you look at the amount of mental functioning, like only 2% of mental functioning is probably conscious. The biggest estimates around 10%.

So 90 to 98% of mental functioning is outside of conscious awareness, yet companies spend a 100% of their budgets on 2% of mental functioning, because they wanna know things that are conscious and practical and easily implementable. And they ignore this vast unconscious. So if you don't get to know how to till the soil of the unconscious, the idea's not that strategy is not important, the idea is that strategy is very important, but strategy is like a tree, and the roots of strategy are actually in the soil of the unconscious.

If you don't till the soil of the unconscious, then you can't really scale that plan. It's very hard to scale that plan. A friend of mine who sold his company to Google, actually, saw my business plan once, and he was like, "What are you doing?" And I said, "What do you mean?" I said, I've got a marketing budget and a sales budget and an interesting idea, I think there is a market here. He was like, "Whatever you're doing it's just wrong."

And so I said, "Well tell me what you're thinking?" He said, "I had the same company for 13 years. I did nothing different. And I realized at a particular point that what you're doing is going after money, which is like chasing balloons. You know, you're getting clients, you're getting paid for it." He said, "If you really want to get money you've gotta create a plan for the balloons to come to you."

I said, "Oh yeah, that's great. But how's the balloon gonna come to me?" And he said, "No. You need a strategy, which is a portal." And he drew me a diagram and he said, "If you don't do any depth work within yourself ... If you don't discover who you are, then you're not gonna attract those balloons through the strategy to were you are."

And I never really got what he was saying, but I can say that as the years go on, I sort of understand what he's saying because in the book I describe this concept, which I call psychological center of gravity, which is like your mental six-pack. And in the same way that you've got to have a strong core, if you're gonna be lifting weights. You know, you can't just lift weights with your arms, if your core is completely non-functional.

You can't really do any exercises if your core is non-functional. In the same way that you need your physical core for physical exercises, you do need your psychological center of gravity. Like, you know, this is who I am, this is what I do. I'm connected to who I am. And unfocus is what allows you to know that.

So when all these tiny fragments of memory are coming up, they are forming your mental six-pack. So when things suddenly change, you can change. When you face some kind of adversity, you can actually face it. But if you are not present ... And when people say, "I have a goal," I always say to them, "The goal part is clear. Is the "I" part clear?" Because if you are not present when you have a goal, you're never gonna be able to make it. You're gonna flail.

I think at a deeper level these practices like doodling and positive constructive daydreaming, and napping and psychological halloweenism, impossibility thinking and hobbies, these practices help us fill out the missing spaces in who we are. And so they give us greater integrity, and give us the mental six-pack that we need to get to our goals.

When you think about your life ... I remember the very first time I met you, the thing that struck me was that you were discovering things and they were not things other people were talking about, but they were things you felt really passionate about. And it struck me that you were just like, "I'm gonna tell people about Bulletproof Coffee, because I have a theory about this. I'm trying it out on myself. This is gonna work. It was from your own experience.

But most people say things like, "Well, let's test the market. Let's first find out." There's some value to that, but if you don't have the idea upfront, then what are you testing?

Dave Asprey:

Yeah. The market size is definitely zero for mycotoxin free coffee until someone noticed that it mattered, you know, and it changed. I wanna ask you about kids, because I had a conversation with my daughter. She's 10 now, and maybe even when she was nine. She was really having a hard time. I'm like, "Go brush your teeth." And on the way, if there were any words she'd stop and read them, and just completely go into what I like to call la-la land.

What we're teaching her to call on the skill of focus when necessary, so you can complete normal tasks. And this is normal. If you don't have kids, you don't know what I'm talking about. If you have kids, all parents have gone through this. So I'm sitting next to her at the table and she ... I said, "Anna, where are you? Are you in la-la land?" And I hear her talking to herself under her voice. She goes, "Bad la-la land." And I was like, "Oh. Anna."

And I think a lot of this fear and judgment comes from that, because when we're kids were trying to focus, you know, we get scolded and all this, and I said, "Anna, hold on a second here." I said, "La-la land is a precious place to go. It's amazing you can do that. Most adults forget how to go there and there's good stuff there. Like, your job is to learn how to go there and how to come back, so you can choose to be in la-la land, but la-la land isn't bad or good. It's just if you go there without control you're gonna have problems. So this is about learning."

And it was like a weight came off her shoulders. You could see, she like took a side. Before she was thinking she was misbehaving every time she was unfocused, which wasn't my intent, as a parent, but it was like, "For God's sake, brush your teeth," you know, how hard is it to walk from one end of the house to the other? Right.

And I think most of us got that, like if we unfocused, like we're misbehaving, and that, that carries forward into our work stuff. How do you recommend that we teach our kids to achieve focus but also be able to be unfocused?

Dr Srinii Pillay:

Well, look, the paradox is that if they don't have enough unfocus, they're not gonna be able to focus, because the brain's gonna be exhausted. The first thing is to create a balance of all of those things, right. The second is to remember that things like rough-and-tumble play, some "mark" wrestlings, or just playing with them, actually improves their attention. The third thing I would say about that, is that most great inventions in the world came from la-la land, right.

Dave Asprey:

Mm-hmm (affirmative).

Dr Srinii Pillay:

When someone was like, "I got a great idea. Let's have an airplane. That thing that goes across ..." People are like, "That sounds ridiculous." You know like, "Oh. Let's invent the Internet." "What? Like, what are you talking about?" So like most great inventions come from la-la land.

So if you don't have la-la land in your life, you are basically saying, "I don't wanna invent anything. I don't wanna have anything exceptional happen in my life." And I think a great example for me, which I mention in the book, is I visited a school called Brightworks, in San Francisco. And they have a summer school called the Tinkering School, and I was so impressed by it, but I knew it was the kind of school my parents would never have sent me to.

I went in. There were no classes, there were bands. So they essentially had people, like 7-year-olds were just in the same band as 15-year-olds. And at first I was like, "God this is like ... How do they communicate? Like, what's going on?" And then they told me that when there was no formal instruction at math, no formal instruction at language, and I was like, "These poor kids are gonna graduate. They're not gonna know a single thing."

Well, I think by the fifth grade, they were two grades above the national average, because the entire process was discovery oriented. You wanna know how to do that? Let's Google it. They will give them themes, like nails. And one kid would be like, "I wanna do a screenplay on nails." And then another person would say, "I wanna make a chair."

They were learning to think for themselves. And I think education has changed to a large extent because it used to be that the information you needed had to be in your head, right, and that was where you got all information. You went to a library, you read books, and you put it all in your head.

It's all online. It's been displaced. Your memory is now online. How can we not change education if the source of memory is now somewhere else? We've gotta learn something different, which is discovery. And even when they do art classes, I mean, they look like Jackson Pollock paintings. They had the kids climb the rafters, and they had paint-filled balloons, and at the bottom they had canvases with nails in them. So they just dropped the paint-filled balloons, and they splashes all over the canvas, but it's their creation.

I even had a kid who I think had not seen someone who looked like me before. And he came up to me, and he was like completely inoffensive, he was like, "What are you?" And I said, "Well, I can answer that in so many ways, like it depends like how you want me to answer to that. I'm probably not gonna answer it the way you want me to, because I think of ..." Like, he got engaged in this whole conversation, and at the end of this, the thing that was astounding, was that on Friday afternoon, where, you know, I've been in many schools, the kids are always like just raring to go home. The kids were literally looking ... They were on the verge of tears.

They didn't wanna leave because the whole experience was all about discovery. They even give them big machines to operate, to cut with. And I was like, "Oh my God." My mother would have been like, "My baby, [he's gonna hurt himself. It's like ..." But they created a little thing called a blood zone. And the blood

zone is where you never put your hand. And so they have more injuries from like playing outside than they do using any of those machines.

All of this in the service of curiosity. And so I think that one of the key ways of getting children to be both focused and unfocused, is to have them be curious, to figure out where the answers are, and then go be focused while they're looking for the answers. Because people will be focused if their own curiosity pushes them somewhere.

If someone tells you, "Why don't you go learn about plant species?" If you don't wanna learn about it, you're not gonna be focused. Your mind's gonna be elsewhere. But if I said to you, "Go learn about this video game because it's pretty cool, and you'll learn how to play it," you will wanna go, and you will focus on all the rules and how that works out.

In short, I think that with kids, sort of stimulating curiosity and then giving them time to be focused to come back to you with an answer. And then encouraging them when they make mistakes to say, this is kind of how the world works. It's kind of amazing that your brain, that every time you make a mistake, it's just a signal that says wrong way, go somewhere else.

There was a girl who was trying to build a chair at the school, and she put everything together. Within two seconds, first the chair fell apart. She looked like she was gonna cry. Her lips were turned down. She was like ... And they were like ... This was stage number one. That's kind of awesome. You went from not knowing anything about a chair to stage number one. That's kind of cool.

And slowly she developed the confidence, and eventually she build the chair. And the sense of accomplishment was not like, I followed someone's instruction and so I did something, when there are two ways to actually live your life. You can live your life following instructions, or you can live your life with your inner voice.

I think Steve Jobs even sought of talked about the fact that you can join the dots moving forward, but you can join them looking backwards. He talked about the fact that he took a class fonts, a calligraphy class. He didn't even know why. He dropped out of college, and was like, "I'm gonna learn writing." No idea how that could be useful later.

And when the time came to actually develop fonts for the Mac, he drew on all that information, and that eventually came to be the fonts we see and use today. There is a sense of ingenuity we have. A sense of intuition that we can cultivate. And I think that children when they are unfocused, are saying, "My mind wants to go out into the fields of my imagination. Can you help me figure out how to go there?"

And that's where, instead of saying, "Start focusing." You say, "Well, let's start with unfocus. Tell me what you see on this journey?" And slowly bring that in. And you can teach this to kids also in physical experiments, right. Like, if you're going apple picking, or whatever it is, you can teach them to venture out a little and then come back. And venture out, and this physical activity also I think helps kids understand that there's a joy in exploring, but there's also a joy in collecting. It's like, let's see how many apples you can get in this basket. They'll focus on getting the apples in, but they'll explore to get that in as well.

So I think these are the kinds of principles that are part of a more modern education. And I think that part of more modern parenting, because if your child only knows how to think linearly, they're probably gonna be replaced by a robot. And this is not just some kind of Star Wars fantasy. Robots have taken over. They deliver food. They flip burgers. They are taking over jobs of middle managers, of doctors as diagnosticians. They're journalists. They create it because they can't pay journalists. They've created robot journalists who just get fed information on the temperature and the type of sport and the score, and they just put together sentences.

If you don't teach curiosity, people are just gonna be like staring at life and saying, "I don't know where to go from here, like, what I am supposed to do? I've got a degree in this thing, and the world doesn't need this degree anymore. How do I manage this?"

Dave Asprey: Pretty profound stuff. I've often thought of how fun it would be to start a school, because there's so much that's missing, and I would immediately institute Neurofeedback in the school. Like, you wanna show kids what's going on inside their brains? Let them see. And it's profound, some of the changes that can happen when you do that, and you teach them to be curious and to play, and maybe also to focus on occasion, so they can brush their damn teeth.

Dr Srin Pillay: Absolutely. I'm a huge fan of Neurofeedback. There's lots of studies to show that it pays to look at what's going on in your brain, because it makes you wanna keep doing it.

Dave Asprey: Yeah. I've been training my kids with something called SMR, Sensory Motor Reflex, which when you're that age and you're still learning how to move your body, and you can actually strengthen the part of the brain that's doing that, which later in life may make them better at sports, which I frankly don't really care if they're great at sports or not. That's not my goal. But just to give them better freedom in their physical body to do what they wanted to do. It seems like a good gift.

Dr Srin Pillay: Yeah. I think so.

Dave Asprey: And, you know, "We can do that." You know, go play ping pong, right. Why not?

Dr Srin Pillay: Whether they play sport or not, I think having that sensory motor integration is really what's ... When we talk about flow and we talk about living life in this kind of happier state, it's when we feel integrated, right, our bodies feel integrated with our minds, our minds feel like they have the permission. When your body's not okay, it's hard for your mind to be in that place, so I just think at the most fundamental level I would be a huge proponent and fan of that.

Dave Asprey: Awesome. Well, we are coming up on the end of the show, Srin, and I wanna ask you a question I'm really eager to hear your answer to this one. If someone came to you tomorrow and they said, "I wanna perform better at everything I do as a human being. So it's I wanna be a better human being. What are the three most important pieces of advice you'd have to offer them?"

Dr Srin Pillay: I think the first would be that in order to perform better as a human being, the first thing to do is to connect with this ingenuity I talked about, and then try to walk them through a process toward originality, which is one of the things I do in the book.

I think the second thing I would say to them is that part of that ingenuity involves not asking how, and looking for answers elsewhere, but looking within yourself and devising the strategy yourself.

And the third thing would be a little bit counter-intuitive. I would say to them, that it is not possible to serve others if you do not serve yourself. There's a lot of talk these days about, you know, I wanna serve humanity and his is my meaning and my purpose and it's out, it's outward. I don't feel like it's helped anybody I've ever worked with, to be looking for admiration from others, about a sense of purpose.

What I find is that people are fundamentally amazing. And when they are inspired from within, they will actually do things to improve other people's lives. So I think those are the three things I would focus on. Ingenuity. Not asking how. And making sure that your sense of meaning and purpose has to do with something that will allow you to feel inspired, so that you can inspire others, because just simply trying to work on the outside is very difficult to do.

Dave Asprey: Very well put and thanks for being on Bulletproof Radio. Your book is Tinker Dabble Doodle Try, Unlock the Power of the Unfocused Mind. It's on Amazon right now?

Dr Srin Pillay: It is. Yeah.

Dave Asprey: Beautiful. For people listening, if you liked this conversation with Dr Srin Pillay, as much as I did, check out his book. It's totally worth a read. And if you're kind of like I've been at various times in my career, focused on getting stuff done, there are some pieces of knowledge, some practices in the book that can be

really helpful for you to figure out how to do something great that you probably didn't think of because you were too busy doing.

And that's not something they teach you at Harvard, not something they teach you in business school, but it's something that I think really matters. And as you've just heard, it probably matters more in the coming years than it did 20 or a 100 years ago. So thanks for being on.

Dr Srin Pillay: Thanks so much for having me. I really appreciate it.

Dave Asprey: If you liked today's episode, you know what to do, head on over, read the book, and while you're at it, leave a review, because for authors like Dr Pillay and me, we spend thousands of hours writing a book so you can spend about four hours observing and absorbing our best thoughts and our best work. And if you take about 30 seconds to leave a review, we actually notice.

If you go to [Bulletproof.com/itunes](https://bulletproof.com/itunes), you can leave a review for Bulletproof Radio, and if you just go to Amazon you can leave a review for Head Strong, or the Bulletproof Diet, or for Tinker Dabble Doodle Try. It's something that is an easy way to express gratitude and it really matters. So leave a review if you like either of our books, and we're always grateful as authors for doing that. Have a beautiful day.