Caspar (00:00):

A recent review on the serotonin theory of depression that states chemical imbalances in the brain are causes of depression resulted in the authors refuting it. They concluded, despite the fact that serotonin theory of depression has been so influential, no comprehensive review has yet synthesized the relevant evidence. We're bringing on someone that actually dedicated the whole first chapter of her book to debunking the myth of neurochemical imbalance. That book was The Healing Depression Without Medication. And this is the story of Debunking the Depression Myth with Dr. Jody Skillcorn. Dr. Skillicorn. Thanks for coming back on.

Dr. Skillicorn (00:35):

Hi. Thanks for having me back on.

Caspar (00:37):

I'm gonna quote your book here. That was written in 2020, I believe, right?

Dr. Skillicorn (00:42):

Yes. Right before Covid.

Caspar (<u>00:44</u>):

Right before, Yeah. And I'm just gonna read one sentence and here right in the front, page 10 that says, The problem with the chemical imbalance theory is that despite 50 years of research, there remains no evidence to validate it and a long list of studies refuting it. So yes, you wrote this back two years ago. Why do you think that only now is July, that this recent you know, evidence based review was published? Why do you think it took so long to actually get any press whatsoever?

Dr. Skillicorn (01:15):

I think we, we all, as humans, right? We believe what we wanna believe and we look for facts to back back that up. I mean, we all have that tendency, we're all guilty of that. Sure. and so, but all of psychiatry is based on this idea. Yeah. And I, so I think one, it's easy to not see it because it's even not, it's not it's certainly not in any of the papers really, that psychiatrists are reading. So it's kind of easy, or your family physician, who actually prescribe more of these meds than psychiatrists do. And so I think we just kind of live in denial, kinda like climate change, right? We don't wanna believe it's happening, so we just ignore it despite the fact that the hurricanes sweeping through it epic scale. But we just, so we, I think that's just how our brains tend to work.

Dr. Skillicorn (02:03):

But this study was pretty convincing and at least got some people talking. Right. Although it was still a minimal conversation, and I was super curious what psychiatry would say. And psychiatry did what psychiatry does, which is pretty much said nothing like just keep going on same old. So that even though there's this study, which looks at all the studies that have been done, looked all the possible ways that serotonin depression could be linked, and they found none. Yeah. I think one probably most psychiatrists haven't even read the study or know it even exists, or if it does, they assume that some crazy person wrote it or, you know, that it wasn't well done or that there was some bias or whatever. Right. There's lots of ways to kind of think about it the way we wanna think about it.

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Caspar (<u>02:50</u>):
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Of course.

Dr. Skillicorn (<u>02:51</u>):

But it was a really sound study, and, and the only people that have responded have basically said, Well, we've known that forever. Like, we know that, we know that that's not the truth, but 80% of the population believes that it is because we're telling them that like the society is telling them that psychiatrists are telling them that their family physician is telling them that. So they believe it. Yeah. But yeah, so I, but with, and then the other thing, the psychiatrist that have responded will say is well, we, so we don't, we know that's not true. And then when they're asked, Well, why do you keep telling people that, they basically just say, Well, it's just simplifies it, it's too complex. So basically saying that the public isn't smart enough or able to understand the complexity, but the reality is, is I don't think there's a good answer. So they, we don't wanna say we don't know. That's a bad answer. Yeah. And then how do you, how do you how do you convince somebody to take these medications, which is really the only tool in the box if, if we don't have a good rationale for it.

Caspar (04:00):

And, and it is the only tool in the box for many people and many psychiatrists and in medicine alone. And you gotta look at that a little bit, right? Because SSRIs, this, this theory validates the use of SSRIs. And if you're looking back at 50 years of the research saying, Hey, this theory makes no sense, it doesn't have any scientific validation, but you have a very large industry that needs it to be validated in order to sell something. Yes. Do you think that was one of the main influences that really got people to buy into something that has no evidence behind it? The big pharma's influence?

Dr. Skillicorn (04:38):

Oh, absolutely. Right. Absolutely. I mean, the marketing, but also not just the marketing, but even what gets published and what doesn't get published, Right. So all the people in, in, in charge of, you know, all the gatekeepers involved there. But absolutely, money is always, money is.

Caspar (<u>04:56</u>):

Always for the money trail. Right.

Dr. Skillicorn (04:58):

It always takes you back to what's going on. Yeah.

Caspar (05:00):

So now that this is out there, you're saying that many psychiatrists aren't even really responding to this? I, I mean, I saw it get picked up. It wasn't like something I was actively looking for. It was on the front page of some news place. Someone sent it to me. It was, you know, published on Instagram by many people. Yeah. Do, do you feel like this may change something in how we approach depression? Maybe not in the short term with psychiatrists right now saying, Oh, but maybe more things will follow to say, All right, let's keep going and dig into this more. Do you feel like that will change the use of, let's say, SSRIs and antidepressants?

Dr. Skillicorn (05:36):

Well, the history of psychiatry, if it follows the history of psychiatry, we're just gonna fight another drug, with another explanation. And I think we already have, I mean, I think what's, what we're moving towards are sort of the psychedelics Mm. Which we've been to before, but I think we're coming back to them. But again, Right. It's, they have some value and they certainly help some people as do some antidepressants. Yeah. I mean, about, they found that it's about 15% has a 15% greater chance of being effective than a placebo, which is a really, really small chance. But there are 15% of people that are benefiting. It's a really small number. But again, it to be the same with, so we can roll out the ketamine and and the mushrooms and, and they can have an effect for sure.

Dr. Skillicorn (06:31):

But there's also real danger, especially in our society with pharmaceutical companies are still gonna control it, and it's gonna become a handed out to everyone quick fix. And that's just not how it works. So my fear is it'll just be replaced with something else. It may even have bigger consequences now, now than it'll be just like the opioid epidemic. Right. It'll just be overprescribed and then there'll be all kinds of outcomes from that. That's my fear. Right. My hope is that that's not the case and that things will change, but I, I haven't seen that happen yet. Yeah. But maybe it will.

Caspar (07:06):

I think it's a, it's a small movement that's, that's going on right in this understanding of holistic psychiatry of other things. The lifestyle changes, responsibility under addressing root causes of depression. And that's maybe something we can talk a little bit about and you did in your book because Okay. The, the neurochemical imbalance is somewhat debunked. Let's, let's, you know, go with that. Now there's more and more, your book did a great job of debunking it as well. So some would say, Alright then what is my cause of my depression? Yeah. Can we go into some of those?

Dr. Skillicorn (07:38):

Yeah. So even in the study they did, what they found, what keeps being found over and over again is it really, it comes back to primarily, So there's lots of factors. Let's start there. There's no one, there's no one factor. Right. But the biggest factor are these early childhood experiences of trauma and stress, which disregulate the nervous system and lead to all kinds of consequences. It does lead to an imbalance in the brains. It's just, it's not a particular one. It causes, right, our, our our limbic system becomes more reactive. Everything, it changes the way we think about ourselves. It changes the way we think about the world. What might, what what is just neutral suddenly becomes threatening. I mean, even with everything going on right now, all the, all the fear around everything and the polarization, right? It's, it's even people without trauma are being traumatized and in the sense that they're nervous systems are getting amped up and reacting and causing this chronic stress pattern, which leads to all kinds of consequences for all, pretty much all chronic disease.

Dr. Skillicorn (08:47):

And, and it can manifest emotionally. It can either be both or one or the other, but it's right. It's having an effect for sure. But these early childhood experiences are pivotal because it changes the way the brain forms and, and functions. And so, and leads to this chronic pattern. But the good news in all this is right. If that's, if that's what's causing it, and that's what more and more evidence shows is, we can change that. We can totally reverse some of these changes. And it may never be the same as someone who hasn't had trauma, but it can certainly be reduced to the point where the nervous system doesn't have to be as amped up as chronically vigilant.

Caspar (09:29):

Yeah. I mean, when you talk about that early childhood trauma, and then you look at what's happened in the past two years, and I have a niece and nephew that are very young and gone through this pandemic with some fear, right? And not going to school, not seeing friends, that that can be traumatic for some children. Do you then think, we are looking at, if we don't do what you're saying and start to address these things that we're looking at, what we've already kind of seen in the numbers, an increase in the amount of children and grownups as they grow up with depression and anxiety?

Dr. Skillicorn (10:03):

Without question. And, and it also becomes intergenerational, right? We know that trauma gets passed on intergenerationally, even big traumas. I was just reading, I actually haven't finished it. I saw it. I saved it. It looks so interesting. Right. But the study is showing that I don't remember which hurricane, but during another hurricane, the children in utero have higher levels of depression and anxiety, which makes sense because that the parents, if the parents are especially the mom, cuz the mom's carrying, if the mom's stressed, she's changing the whole right, her chemicals are influencing the, the the formation and of the, of the child. And so that then changes epigenetics, which gets passed on and then it keeps getting passed on unless we take responsibility and learn how to kind of turn those off. And there's so many ways to do that.

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Caspar (<u>10:56</u>):
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Yeah.

Dr. Skillicorn (<u>10:58</u>):

You know, breathing and meditation and any kind of mind body stuff and being outside of the nature and a healthy eating and all of that, all of these things can change these genes, but we have to take the responsibility to do it.

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Caspar (<u>11:10</u>):
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We do.

Dr. Skillicorn (11:12):

And that is way harder than a pill.

Caspar (<u>11:14</u>):

Way, way harder. And I understand it's the easy way out. It's, it's simple, like you said, some psychiatrists or it's simpler to just explain it's an, you know, it's an imbalance and just take the pill and you'll be better. Yeah. But if you were put in charge of, you know, trying to combat this, this growing depression epidemic that we're seeing, where would you start? What would you do? Like, you know, because you see there's so many things. Right. And I sometimes feel that when you give so much, do meditation go in nature, do it becomes overwhelming for a person. Wow. That sounds like a lot. And that's so different than what I'm doing day to day. Yeah.

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Caspar (11:50):
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Where, where would you start and what would be your kind of approach to, to start to combat this?

Dr. Skillicorn (11:56):

Well, I mean, the big answer is, is that we have to change just societal structures, right? I mean, if there's still poverty, if there's still inequities, if there's still injustices, right? That's just stress and trauma. Yeah. But since I can't do all that, but that's what has to be addressed, so that all those are all pieces that have to be addressed. Right. We wanna prevent it and we wanna prevent it from getting worse, we have, we have to address those things. Yes. But what I think could be done more easily and more quickly is, right, there is a movement, a small movement to get some of these trainings, right? We should be training kids from the time they're in pre-K Right. In preschool, if we can train kids and give kids, no matter what their backgrounds are, no matter what they're suffering, at least we can give them tools to like manage it better so that they're not as stressed so that they have and obvious support is also good.

Dr. Skillicorn (12:51):

Right. We need, in the school systems, there needs to be both of those things and the school systems that have done that, the school systems that have added, say, mindfulness programs to, Right. They've, some of these schools, these are really impoverished high risk schools and they've had incredible turnarounds. It works. And it's, that's not a big investment, right. You don't have to change the whole system to do that. All that has to be done too. Right. But that's something that's relatively inexpensive. It would and it could be done across the board and could dramatically change.

Caspar (<u>13:25</u>):

I I find it wild that we still haven't implemented it. Right. Because you're right, it's so simple. It wouldn't cost much, it wouldn't go against anyone sort of, you know, belief or anything like should.

Dr. Skillicorn (13:35):

It does. Oh yeah. How, that's what I found. Cuz even at my kid's school, I tried, I talked to the Oh really? Why, why isn't this happening? Yeah. And, and they said they got huge feedback and it's language, right? So mindfulness is associated with eastern religions and know you're trying to, you're trying to, you know, brainwash my kid. And so I think it just needs a different language, right? It needs, we just need stress reduction programs. Right.

Caspar (<u>14:01</u>):

Do we need science then? Is that, you know, because that's kind of the new dogma of the, the time, Right. Follow the science. Everyone's like, Oh, of course we have to. Is that it?

Dr. Skillicorn (14:10):

Well, it is, it kind of, it isn't. Right. I know. Also reject science too, so.

Caspar (<u>14:13</u>):

Well then it's a religion and people will reject that too, right? So. Right, right. Yeah. What, what do you think is the best way? Is it just calling it the stress reduction and teaching breathing and meditation in classes for a few minutes?

Dr. Skillicorn (14:26):

I mean, I it'd be a place to start. Yeah. It, you know, I mean you know, obviously it'd be nice if schools also had healthy food and, but what if, but just on this most simplistic level, what if just before every

shift in class would, if you just took a minute, took three breaths? I mean, it sounds so simple and so ridiculous, but it changes the nervous system.

Caspar (<u>14:46</u>):

Absolutely. Three deep breaths will totally change you from sympathetic to parasympathetic.

Dr. Skillicorn (14:50):

Right. And over a lifetime. That's some, those are massive changes with one, just a simple, simple intervention. I think it's just, I don't know. We're so trapped in this idea that it's all about Yeah. Right. The biochemical balance all about some body part that's malfunctioning and we're missing a bigger picture.

Caspar (<u>15:10</u>):

Yeah. We often miss the bigger picture, I feel like, with a lot of this. And we like to nail it down to one thing like serotonin. Right. It makes it easier for us to comprehend again that way. But yeah. You know, now that we're seeing more and more of this and you know, understanding these aren't the real issue. There's much more we have to dig deeper and everything. If there is someone out there that's dealing with depression on an SSRI or some kind of antidepressant, what would be your recommendation if they're saying, Well, wait a second, this isn't my imbalance, this is something else. What, what do I do?

Dr. Skillicorn (15:41):

Well, one, unfortunately, once you're on it, it is tricky to get off of it. Right? So you do need someone to help kind of taper and, and, but meanwhile, right, I mean, starting to learn some of these skills on your own is entirely possible. Right? There's so many apps now, Right. You don't even need to pay for. You know, there's, there's just a ton. There's insight timer and head space and, and these are all free ways to learn some of these skills. So that would be one place because you can start to balance your nervous system that it's gonna be way easier to get off the medication. Cause it's almost impossible to get off the medication without having some other, if you don't replace, if you don't have a way to manage the emotions Yeah. And you just go off into a void, then you are gonna, between the withdrawal and the fear. Right. Rebound happens often. And then it's, you're told that, we'll, see that's why you needed the medication, but it's not the medication you need. What you need is something to fill the void of that medication. Something to balance the nervous system.

Caspar (<u>16:42</u>):

Do you feel that sometimes that goes back to purpose? You know, I, I I feel like a lot of times it's a lack of purpose. It's a lack of fitting in almost what is my, you know, value here. If I'm just depressed, feeling sick, not really contributing and, and don't even know what I wanna do with my life. Is that part of it?

Dr. Skillicorn (16:58):

Oh, absolutely. Yeah. I mean that's a piece too for sure. And, and, and again, how our thoughts and how we think about things, but as our nervous system settles down, our thoughts start to shift too. We're not as, it's like our thoughts need to fill in the story. So if we're feeling anxious, then our minds create stories to explain what's wrong with the world or what's wrong with us or what's wrong with the people around us.

Caspar (<u>17:23</u>):

Yeah.

Dr. Skillicorn (<u>17:23</u>):

And when we're more settled, we can kind of see it more clearly.

Caspar (<u>17:27</u>):

Yeah. You know, with everything that, that's going on. As far as the, the study coming out, the review coming out, are you hopeful that you know, this, this will begin a, a change to start to review things like all of that we're talking about? I mean, I know I asked this a little bit, but now that we understand a little bit more that what isn't, do you think that will, you know, really impact people and how they start to go about depression? That the pill is not the answer?

Dr. Skillicorn (<u>17:59</u>):

Hopefully? Yeah. I mean, I think it's, that's where it starts is right with people. If individual, if individuals are have knowledge, then they're not gonna accept just here take this.

Caspar (<u>18:09</u>):

Yeah, yeah. Because

Dr. Skillicorn (18:11):

Feel like people are aware

Caspar (<u>18:12</u>):

The the truth is coming out more and more. And I think it goes against their belief systems and starts to change. You know, once you crack through that belief system that, hey, this was, you know, imbalance in me, you start to say, Well, what else you know, can change? You know, what, what else? Because again, I, I find it wild that we so relied on follow the science when science changes drastically you know, from day to day as we're seeing right now what we believed was truly scientifically proven that this was an imbalance is now saying, well, no, not, not so quick, but it took 50 years. Right. It took so long to get there. Yeah. Are you hopeful that other things out there that, you know, as far as it relates to depression we'll start to see other changes as well? Like how we go about, you know, scientific proof of, again, meditation moreso and other things. Do you think this will start a cascade of what else?

Dr. Skillicorn (19:04):

Hopefully. I mean, so much of science is also based on what questions we ask, right? Yeah. So we keep asking if we're assuming that there's some genetic or neurochemical imbalance and we keep asking those questions, that's all we're looking at. Yeah. So hopefully, yeah. Different questions get asked that different science can get done. And I think it's also important for people to realize science is not right. I mean, this is what you learn in like second grade, right? Yeah. When you learn about basic scientific method that it's not a, it's, it's always changing. It's science. It's not a finished fact. And just because one fact, cuz I saw a lot of the studies on dismissing science because this got debunked. And I think it's just important to realize that's not what science, It doesn't debunk science. Science. It's asking questions with an open mind when it debunks as the pharmaceutical companies like twisting of science to use it for their own gains and to prove what they wanna prove, that's not science.

Caspar (20:01):

Absolutely. Yeah. We have to make that distinction sometimes cause people have a hard time understanding even what that word science really means. You know, and, and kind of bringing it back to, to an evolving and, and ever changing type of discipline of sorts. Yeah. You know, you wrote this book a few years ago now. Any plans to write anything else a follow up?

Dr. Skillicorn (20:23):

Well a, I have a friend who's a lawyer and she, we've been talking about the idea of working on the idea of, of climate change, her from a lawyer perspective and me from a mental health and, and what that perspective.

Caspar (20:37):

So that would be great. Yeah. Really quickly, from your perspective on the climate change and how that relates to depression and mental illness, what, what are your thoughts on that?

Dr. Skillicorn (20:49):

Well, I think one, we have to be careful not to pathologize that because it is overwhelming and a lot of people are really anxious, especially young people that are gonna be affected the most. But I think the danger is, is not to get, again, to, gets trapped in the stories where there's no hope and there's no possibility because that's going to lead to depression, that's going to lead to more anxiety. We have to and so we have to take action, which helps reduce, again, purpose like you were talking about, right? With the purpose of taking action with the storyline that we can do something. Right. I think that can reduce a lot of. But I think the danger is, is we get trapped in these fear narratives Yeah. And this hopelessness and the despair. And if we go down that road, then yeah, there's gonna be a lot of.

Caspar (21:39):

It's a vicious cycle, right? It's a vicious cycle. And unfortunately many already caught in it, in this fear, you know, of just news and everything else. And then so much information being thrown at us that, that can overwhelm the nervous system and absolutely cause that. Dr. Skillicorn. Where, where can people learn more about you purchase the book?

Dr. Skillicorn (21:58):

I think the book is, Well I know it's on Amazon and

Caspar (22:02):

Send it to Bezos, right? Yeah.

Dr. Skillicorn (<u>22:04</u>):

Pretty much. I think you can find, I don't know. Google it.

Caspar (22:10):

Well, thank you so much. I really appreciate, you know, and, and I have to say the book was really eye opening. I love that it's still all this, you know, two years later being validated, you know, what you're putting in there is now validated, so that must feel great. Thank you for coming on.

Dr. Skillicorn (22:24):

Yeah. Thanks for having me again. It's good seeing you.

Caspar (<u>22:26</u>):

You know, depression is a multifaceted condition. It really does deserve greater attention while medication may be warranted, as we said here, we need to go beyond this to get to the root cause and understand what we may have known in the past As true or science can change Dr. Skillicorn's book, Healing Depression Without Medication is an incredible resource you can find out on Amazon's as we just said, or Google it. And until next time, continue writing your own healing.