



## **The Power of Connection: What Interpersonal Neurobiology Can Teach Us About Parenting**

Dr Dan Siegel

Interviewed by Dr. Laura Markham

Dr. Laura Markham ([00:04](#)):

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Welcome. Hello, I'm Dr. Laura Markham, founder of Peaceful Parent, Happy Kids and organizer of this online summit, Nurturing Hearts, Nurturing Minds, the Neuroscience of Peaceful Parenting. Today our guest is the beloved Dr. Dan Siegel. Dan Siegel is the co-founder of the Mindsight Institute and founding co-director of the Mindful Awareness Research Center at UCLA, where he was also co-principal investigator of the Center for Culture, Brain and Development and clinical professor of psychiatry at the School of Medicine. Dan is the author of five New York Times bestsellers and over 15 other books, which have been translated into 40 languages. As the founding editor of the Norton professional series on interpersonal neurobiology, Dan has overseen the publication of 100 books in the transdisciplinary interpersonal neurobiology framework, which focuses on the mind and mental health. Today we're talking with Dr. Dan Siegel about the power of connection, what interpersonal neurobiology can teach us about parenting. Dan, welcome to the summit.

Dr. Dan Siegel ([01:21](#)):

Laura, thanks for having me. Great to be here with you.

Dr. Laura Markham ([01:24](#)):

Well, I'm always glad to talk to you, I learn so much, and I know that the parents who are listening have probably no idea why they should care about interpersonal neurobiology. But what can we learn as parents from ... you're the originator of this big idea, so how can we apply that to parenting?

Dr. Dan Siegel ([01:46](#)):

Well, the idea is simply that what you do as a parent matters for many reasons. One, because you have an opportunity through your relationship with your child to shape how your child's brain develops.

Dr. Laura Markham ([02:03](#)):

That's pretty powerful, tell us more.

Dr. Dan Siegel ([02:05](#)):

That's powerful, and it's not to put pressure on you. It's more like a privilege than a pressure. The invitation is just to learn how the communication that you have with your child, the connection you create, allows their brain to develop, what's called integration, which is how different parts of the brain become linked to each other. So integration in general is where you have things being specialized or different or unique, like left and right for example, up and down for example. And then you connect those differentiated, meaning they're different, those different areas to each other. So amazingly ... and this is now the review of lots and lots of research that is in the science part of the world that I work in, when you summarize that science basically it says, when your communication is integrative ... meaning, when you honor the differences between you and your child and promote compassionate communication, that's an integrative relationship you're developing. Amazingly, when that relationship honors differences and promotes linkages, the same thing happens in your child's brain. All the research shows that if you want to have a child who's resilient, who's insightful, who's capable of rewarding relationships with others, all those things are dependent on integration in the child's brain, and that integration is supported by the integrative relationship you create with your child.

([03:45](#)):

So in a nutshell, relational integration becomes brain integration, which is the basis of wellbeing and resilience.

Dr. Laura Markham ([03:55](#)):

Okay. And all of this comes from the integrative way you're relating to the child, which is about respecting the difference and linking, the linkage.

Dr. Dan Siegel ([04:07](#)):

Yeah, exactly. Exactly. A patient of mine a long time ago came up with the phrase, feeling felt, when I asked her, "What happened in this therapy that worked?" Because I wasn't doing what my teachers were telling me to do. I thought she was actually my best teacher, so I thought I'd ask her and that's what she said, "The experience of feeling felt made all the difference." In a sense 'feeling felt,' that she was articulating, is a way where we sense that we are inside the mind of the other person, so we're no longer alone. It's a way of becoming a part of a 'we.' When children feel felt, they experience a 'we' with you as their parent, and that gets internalized in what we call secure attachment. In the brain what that means is, they're cultivating these internal integrative networks that allow them to have resilience. It allows them to have what's called optimal regulation. It allows them to feel vibrantly alive. It allows them to have the H word, happy. It allows them to feel well-being and flourishing. All these things come from integration.

([05:24](#)):

So I think the fundamental take-home message about looking at the brain, for you as a parent, is that it helps you know how to cultivate integration in your communication, that then stimulates the growth of integration in your child's brain. That's the best predictor of their resilience and flourishing.

Dr. Laura Markham ([05:48](#)):

As a parent, what would be an example of how I could connect with my child in this way? You're talking about communicating, which sounds like words, but I'm betting it's much more than words, to feel felt.

Dr. Dan Siegel ([06:00](#)):

It's much more than words, right. You have a left hemisphere and you have a right hemisphere also inside of you. I'll give you an example. Let's say we're going to have a family gathering, and my five-year-old is getting really excited. He's got a new ball he wants to show to his uncle, his uncle is about to come over. He's throwing that ball all around the house, and it hits the lamp and the lamp falls over. This is a lamp that I know my wife really likes a lot, and I'm taking care of things downstairs, including the kids or whatever. So I could go to my son and say, "How dare you throw that ball?" Blah-blah-blah, with all these words, and everything I was saying was correct. He shouldn't throw the ball. He shouldn't break the lamp. He should be able to control

himself. I would have missed the opportunity to join with my child, and then once I connect ... I redirect, as Tina Bryson and I say in *The Whole-Brain Child*, I help him redirect his behavior, there it is. So instead what I do is, first I differentiate my own left hemisphere, language-based, logical things I'm going to say, and I will say them soon but not at first. First, I differentiate and I identify with his experience of excitement that his uncle is coming over and he wanted to practice with his ball.

(07:34):

He's just five, and all of his enthusiasm led to hurling this ball around the living room, which he knows he's not supposed to do, and he breaks a lamp. Now, I can shame him for doing it and say, "How dare you? You know enough not to throw balls," and all that stuff. That's actually going to just make him feel, not just that he did an action that can be corrected, but that he's defective. There's something wrong with him. Instead, if I join with him and say, "Listen, I know you're really excited about your uncle coming. All that energy you have is hard to contain and you're in the house, this isn't okay, you know that, to break the lamp. We're going to fix the lamp up. It's just an object that can be fixed. Why don't you take your energy outside, throw the ball against the wall where you won't hurt anything, and then when your uncle comes over you can play basketball with him?" Or whatever. So what I've done is, I've joined my child where he feels felt in his enthusiasm and energy and excitement, and the fact that he's just five and his uncle is coming over, so he's not alone. I've said, I understand how all that energy led to a behavior that you didn't really want to do, you broke a lamp.

(08:50):

Let's have an observing aspect of this experience where we observe, there's energy, there's enthusiasm, that energy should not be inside of a living room where you're hurling a ball around, go take your energy outside. So instead of shaming him, I've actually empowered him to regulate his own behavior.

Dr. Laura Markham (09:13):

And what happened in the brain? If you had shamed him, one thing would have happened in his nervous system and the brain.

Dr. Dan Siegel (09:20):

He would shut down.

Dr. Laura Markham (09:21):

Yes. He would shut down, probably shut down or else get angry. But yes, he would have felt the threat. But instead you did something where he felt felt, where he felt he stayed connected to you, even though you were guiding his behavior because you connected before you redirected. What happened in his brain? You said, "We don't want to miss that opportunity." What was that opportunity that we capitalized on here?

Dr. Dan Siegel (09:47):

Right. Well, when we talk about integration in the brain, there's a lot of ways you can actually study that. Probably what's happening ... obviously I'm not going to put my son in a scanner, but the parenting move there is to activate a part of the brain that's behind his forehead, called the prefrontal cortex. Now, it's going to grow throughout adolescence, certainly past the teen years and into the mid to late 20s, which is how long adolescence goes. That region of the brain is like the master control area. It's like the executive control. If you watch the Inside Out movies, Inside Out one and two, that's really what they mean by the executive control panel, is the prefrontal cortex. It's the master integrative area. So what it would do, it would allow him to be in his prefrontal cortex ... with the option number two, when I'm connecting before I redirect. What it does is, it allows his prefrontal cortex to go, oh, I see my dad is identifying my energy in my body, and then his prefrontal cortex will imitate that, oh look, I have energy in my body.

(10:58):

And then I said, "That energy can be contained, and you can go outside and throw the ball," and then his prefrontal cortex is going to go, oh, even though I have all this energy and I want to hurl this ball, I can delay my gratification and wait, take the ball outside, inhibit my behavior, and then throw the ball outside. So that's an integrative growth of his prefrontal cortex and option one, which is when I'm shaming him, the whole system shuts down. Nothing is growing. He's just basically feeling terrible about himself, not just on his behavior but on who he is as a person, that's what shame is, and then the whole thing shuts down. Shame is the opposite of learning. It's the opposite of integration. So with the second option, when I connect before I redirect, what I'm doing is, I'm joining with my child. I'm allowing him to develop his prefrontal ability to delay gratification. When you look at the old studies of, you probably know the marshmallow test, the kids that could resist eating two marshmallows ... Well, no, there's one marshmallow given, right? They said, "If you wait, I'm going to give you two."

(12:21):

Those kids that could wait and then they got more marshmallows in the end, they studied them decades later and those kids are doing much better in almost every area of their life. So this capacity to have integration in the prefrontal region of the cortex behind your forehead allows you basically to have a buffer between an impulse and an action. Shame gets rid of that. It just makes a person shut down and the next time they have an impulse it's just going to, bam, pop out. Whether you're in a relationship with a friend or a close person or working in a company, or you're out in the public setting, whatever, you can see people do this where they don't have a prefrontal integrated capacity to be aware ... I call it mindsight, be aware of their own inner mental life. Oh, I have an impulse to throw a basketball, let me wait and throw it outside. Or they just say things that have a disregard for its impact on other people. They make insulting comments or disparaging things, or they act like they're the ruler of the world.

(13:32):

All this kind of stuff shows a lack of prefrontal development. So if you want your child to actually be more like a human being than a source of just impulsive action, then this is what you want to do, you want to develop integrative resilience.

Dr. Laura Markham (13:51):

Which comes from the relationship originally.

Dr. Dan Siegel (13:55):

Yeah. This would be, in certain abusive situations you'd see people coming out being incredibly lacking in mindsight.

Dr. Laura Markham (14:05):

Let's talk about mindsight. I know you say it's our seventh sense, I love that. How can parents develop mindsight in their children, but also in themselves, I guess?

Dr. Dan Siegel (14:17):

Yeah, absolutely. Well, when I wrote Parenting from the Inside Out with Mary Hartzell, our goal was to invite parents to do what initially can feel like a pretty vulnerable thing to do, which is to say, what was it like when I was a kid? How did that vulnerability, how did that dependence I had on caregivers who may not have been so optimally caring for me, how was that for me when I was a kid? So it means as an adult you're going, oh gosh, that was a really hard time. For some of us, it was a fine time. For many of us, it wasn't a fine time, and for all of us, no matter what the time was, you were a dependent little being. So what it reminds you as a parent is, what

did you go through? Then you can make sense of that, and then as you start to parent, the research shows, from a making sense point of view you've liberated your capacity to be more integrated with your child, I think because you've developed these mindsight skills first for insight but then for empathy. And then what that means is, you can participate in something I call reflective dialogues, a conversation about the inner nature of the mind.

(15:39):

These conversations are basically where you talk about, what were you feeling? If I were going to elaborate on the ... it'd be hard if my brother were coming over, my son's uncle, that might not be the time to do it. But other times, in other situations you might do something like, "What were you feeling when you threw that ball? It's not good to throw a ball in a lamp." "Yeah. Uncle Joe was coming over and I really wanted to show him I could throw the ball really far, and I was picturing it," all these things. He may not say it all that detailed as a five-year-old. But that idea of saying, I, your dad, am interested in your inner life, you also can be interested in your inner life. What happens when that goes on is that this person develops insight. So when people ask ... this is such a fascinating set of studies, but who are the wise people in a community? They're people who had a number of features but two of the features were, inside of their own internal world and empathy for the internal worlds of others.

(16:53):

So that allowed them to be compassionate as well as empathic, right? Those were considered the wise members of the community. So if you want your child to be a wise person, then develop these mindsight skills. They're the fundamental basis of what we consider wisdom.

Dr. Laura Markham (17:12):

So it's really the discussions we have with the child where they're becoming aware of their own inner world, and also that our inner worlds can communicate. We can communicate about their inner world with them.

Dr. Dan Siegel (17:28):

Exactly. I mean, I'll give you one study, it's kind of a shocking study, but they did studies of kids who were deaf. They compared kids who were born deaf who were raised by parents who could hear, and those that were raised by parents that also were deaf. They found in one group, kids had a very robust mindsight ability. It's called theory of mind, it's a formal study. But basically you study whether the person, in this case a child, knows that there are things like feelings and thoughts and

memories, and understands that your perception and experience of life is very much related to those thoughts and feelings and memories you have. That's a mindsight ability. One of these groups didn't really have much mindsight at all, and the other had a robust sense of mindsight. It's hard to predict which group was which, but the deaf kids raised by deaf parents had fully developed mindsight abilities, the deaf kids raised by hearing parents did not. The thought was that the parents who were hearing parents only learned rudimentary sign languaging, whereas the deaf parents had a rich vocabulary with their sign languaging, so they could have conversations with their hands, sign language, about the mind.

(19:05):

Let me give you a simple example, let's say a kid is on a tricycle and falls off and hurts herself. One parent could go over to them ... whether it's with language, with words, or we could do it with the sign language. One parent could go over to the kid and say, "You fell off, get up." Another parent could say, "You fell off. That must have been so scary. Here, let me comfort you. Oh, that must hurt so much in your knee. Let me give you a band-aid," something like that. So one parent, the second one, is using this mindsight language to say, I see that you were scared. I see it may have been surprising to fall off. I can see, your knee is probably giving you pain. All of those things are subjective experiences of the mind. Versus the first case was, you fell off, so I saw your body, get up. Nothing about the mental life. So we as parents have this opportunity to realize that, sure, you can see with your eyes, physical sight. But mindsight is, you can see inside the mental life, the subjective experience, feelings, thoughts, perceptions, reactions, bodily sensations, all that are a subjective experience of the mind.

(20:27):

You can not only see it and sense it with your own mindsight, but then you articulate it in these conversations. So when you put words to the inner nature of the mind, your child develops insight and empathy.

Dr. Laura Markham (20:46):

Just by being understood, they're developing empathy for others. Not just, but that-

Dr. Dan Siegel (20:52):

Well, understood, and then I would add to that, Laura ... understood, and then that understanding communicated by you as the parent. Not just quietly, oh, I understand my kid and I just say to him, "Get up." No. But this is where, if we ourselves didn't get that, you could learn this at any time. So if you go, oh my gosh, I never got that when I

was a kid. Dan and Laura, what are they telling me to do? You can learn this. It's a beautiful skill to learn because even not just with your own kid, in all your relationships it actually deeply enhances the way we connect with others.

Dr. Laura Markham ([21:35](#)):

So how does attunement fit into this? Because of course, with attunement, we're moving in and out of attunement all the time. Sometimes we're able to attune and sometimes we're not.

Dr. Dan Siegel ([21:46](#)):

Yeah. Attunement can be defined as how we pay attention to the internal world of another person. The wonderful researcher Ed Tronick has shown that so often we're not attuned. So often we're not attuned and when we have breaks in attunement, we can repair them. So we shouldn't feel like, oh my God, I need to be attuned all the time, I'm not a good parent. There's no such thing as perfection. There's just going up and being present. So once we can release that pressure on us, then we can see, okay, there are moments of attunement, especially when emotions are heightened, that are especially important. If we miss an opportunity or we misunderstand, then we can make a repair. So what Ed Tronick has beautifully shown us is that it's so important to realize that repair, repair, repair, make your reconnection, is so vitally important. When we do that reconnection, our child is learning, wow, my parent showed me that you don't always get it the way it could be. When you realize that, you come back and say, hey, let's take two, let's begin again. And then what's so cool about that is, and this is what I love about working with parents, you say, look ... that moment when you realized you didn't make a connection when you could have, one aspect of you may be really hard on yourself, beating yourself up saying, what's wrong with me? This is so bad.

([23:36](#)):

Oh, I think I'll just ignore it, because it's too hard for me to open up and say, I missed an opportunity because I want to be the good parent, and then they don't do anything. Whereas another parent who has the courage to be wrong says, "I think I was wrong in how I responded to you before. Let's begin again. Let's do that again. When you fell off your tricycle, I'm so sorry all I did was tell you to get up. How was that for you?" Or some bigger event than just falling off a tricycle. And then your kid says, wow, I'm learning that it's okay to acknowledge a mistake, it's okay to acknowledge a disconnection, and then to make an effort to reconnect and repair the rupture.

Dr. Laura Markham ([24:23](#)):

So that reconnection is a kind of integration.

Dr. Dan Siegel ([24:26](#)):

It's definitely an integration. It's honoring this difference, what could have been versus what was. It's having the strength to say, whoops, that was a blooper, let's do it again. It's owning your own humanity and attunement. When you think about it as this attention to the internal world of the other, you don't always get it right so you might say, "I was wondering if you were feeling mad." "No, I wasn't feeling mad, I was feeling scared." You go, "Okay, great." So you can say, I wonder if you were feeling this, or I imagine perhaps you were feeling that. Rather than some omniscient, I'm the super powerful guy, I know what you're feeling and you don't know what you're feeling. No. You say, "I wonder if that was scary." "No, I'm really just frustrated with myself. I wasn't really scared, I was really mad at myself," or whatever your kid may say. So this is the really wonderful opportunity about attunement, is that you can always repair a rupture knowing that what we're aiming for is how another person feels felt with us, but it doesn't always happen and that's okay.

Dr. Laura Markham ([25:35](#)):

You said, I love when you say attunement is about the attention because I know you always say, attention is what changes the brain. What we're attending to is what's changing the brain, is that right?

Dr. Dan Siegel ([25:47](#)):

Yeah. Where attention goes, neural firing flows and neural connection grows. That's the rhyme that helps you to remember it. So as a parent, where you're focusing your child's attention actually gets their brain to fire off in a specific kind of way. When that's integrative, that's where the integrative fibers are literally going to grow.

Dr. Laura Markham ([26:16](#)):

So to wrap up here, you're saying that it's partly how we show up in an integrative way, where we're with our child having this attuned response. But also it's the opportunity we're giving our child to develop mindsight by having us be interested in their inner life.

Dr. Dan Siegel ([26:42](#)):

Absolutely, that's right. That's absolutely right. Yeah, exactly.

Dr. Laura Markham ([26:48](#)):

Any last words of wisdom for parents about what they can do? If this is all new to them, where can they begin?

Dr. Dan Siegel ([26:55](#)):

I always think people should begin with Parenting from the Inside Out. Mary Hartzell and I wrote that to be a big hug saying, this is hard work but start with an inner understanding. And then you could go to either The Power of Showing Up or Whole-Brain Child I wrote with Tina Bryson. I think if you just start with those three books, that's a great place to begin to say, how do I bring secure attachment, integrative growth in my child's brain to the relationship I have with my kids?

Dr. Laura Markham ([27:30](#)):

Beautiful, thank you. I also want to take the opportunity just to thank you for all the work that you've done, the many books you've written for parents, and all of the original thinking that you have brought to the field of understanding what it is to be human. Thank you.

Dr. Dan Siegel ([27:48](#)):

Oh, thank you. Thank you, Laura. Thanks for all your wonderful work, and great to see you.

Dr. Laura Markham ([27:51](#)):

Great to see you. Bye-bye.

Dr. Dan Siegel ([27:53](#)):

Bye-bye.