## From NEURONS TO NEIGHBORHOODS New Ways to Prevent and Heal Emotional-Trauma in Children and Adults

## Second Annual Conference May 17<sup>th</sup> and 18<sup>th</sup> 2003 Los Angeles, CA

# CLINICAL WORK WITH ABUSED AND NEGLECTED CHILDREN - II Bruce Perry, M.D., Ph.D.

From the 2003, from Neurons to Neighborhoods Conference, this is tape number 15, part 2 of a workshop with Dr. Bruce Perry on Clinical Work with Abused and Neglected Children and Their Families.

I want to expand a little bit and continue to talk more about some of the clinical things we've been doing with high-risk kids. Hopefully we'll get to things that are useful for some of you.

This is I think one of the more useful slides I will show today, because it illustrates and summarizes a lot of important points about the impact of your internal state on the way you process information. Most of you have heard about state-dependent learning and state-dependent recall, which is the converse of state-dependent learning essentially. I want to take a minute and walk you through some of this stuff, and give a few examples about how understanding this continuum is helpful in clinical work. I, also, want to show you a little bit about interviewing.

So here we are, you are all hopefully relatively calm. But the fact is you're not completely calm. You are externally oriented. You're listening to me. You're not listening to what's going on inside your head. You aren't right over here, you're kind of right on the border between calm and vigilant. You're externally focused. You're trying to process what I'm saying. It's going into active working memory, where you're mixing what I say with all kinds of things that you've already stored. You're thinking, "Well that kind of makes sense," and "I've heard somebody else say this," and "what does this mean," and you're playing with these ideas.

What will happen is some of this will go into short-term memory, and if you have the opportunity after this presentation to have moments of reflection and sleep, information that's in short-term memory will end up in long-term memory. Then later on when you're having a quiet moment, when the TV is not on and when you're in a safe and familiar environment and you really are calm, you're going to find your brain taking information that you previously stored and begin playing with it, making new connections, thinking about it in different ways. You'll have these little moments where, in your head it will pop in and you go, "Oh, I wonder if this is what he meant by that?" "I wonder if this is an example of this?" And, "this makes sense in context of what I just learned." Your brain does all these wonderful, creative things. That's a good thing. That's great for all of us.

Unfortunately, as I said earlier, our culture no longer respects silence. Our culture no longer respects meditation, no longer respects solitude. Very few people get into this internal state, except by accident. We stumble into this state of calm in the morning when we're talking a shower and things pop into our head or when we're driving home from work on a familiar route. We've done it a thousand times. We listen to music we've heard a million times before. Then things will pop into our head.

If you ever think that you have a good idea, and you're at work, you don't have a really good idea. It's really not as good as you think it is. It's sort of like those good ideas you had in college after about five beers, or other things, and you wake up in the morning and go, "Was I really thinking about starting a business that sold popcorn?" These weird ideas, they're not good ideas. The reason that is, is here you are at work, you have to be externally focused, you're thinking about your next appointment, you're thinking about the next what's going to happen tomorrow, and the deadline you have for this grant or your paper or whatever. It's taking you out of the smartest part of your brain. You're doing things that are automatic, routine, and relatively concrete. Fortunately, we will have moments where we get back over here. We'll go back and forth.

Sadly for the kids that we work with, maltreated children, they're right here at baseline. Their baseline is such that when they are in an environment that we think is safe and familiar like school, they're internally focused, not perceiving the experience the same way that another child would be who is calm. This is a really important point, because the teacher will be giving a lecture and trying to teach cognitive content, and the cognitive content will go over here. But, this part of the brain is less efficient and less active in this child, so they don't learn or acquire cognitive information as efficiently. We actually end up very often labeling these children as having learning disorders. It's anxiety-driven a lot of times, and anxiety may not be the right word. But, it's basically because their brain, their brainstem systems are set at a state that's too high. They're overly reactive.

It's an important thing that we understand this, because the acquisition not just of cognitive information, but the acquisition of social affiliation information is impaired by being in this state. What these children are paying attention to are threat-related cues. They're not paying attention to the subtle social cues about how close you stand, when is the appropriate time to touch, and when is the appropriate time not to touch. They're paying much more attention to who is talking to whom and who the teacher is looking at. They figure out who is the teacher's pet, who the teacher scowls at, who is most powerful, and who is friends with whom. They end up, as I said before, the combination of their brain being in this state and being marginalized so that they observe all the time, which leads to this tremendous overdevelopment of the capacity to read nonverbal cues. In fact many times this capability is so distorted that they are inaccurate in interpreting our nonverbal cues.

We call it inaccurate because we don't consensually agree that eye contact means the same thing. For me eye contact means a nice thing, I'm engaging you, right? I'm trying to connect with you. But for these children, their internal catalog is filled with incidents

where someone looked at them just prior to figuring out what they could get from them. They were casing to figure them out. Are you going to resist when I try to take that from your hand? What are you doing? Thus, eye contact has been antecedent to harm. So their internal catalog is different. Their internal template to all these nonverbal cues is different.

You can show a videotape of a car stalled on the road with a flat tire and another car pulls up and somebody gets out and you stop the tape and you ask, "What's going to happen?" These children will say, "Oh that guy's going to rob him." Clearly, according to these children, he's going to take something from him. "Why would that happen?" you ask. Their internal catalog is different, because that's what their world was. Here they are in this state of high arousal.

Let me give you an example of what we frequently do in a school setting, a foster care setting, or some similar environment. I'll give you an example from school because I use it all the time, and I can describe it the best when I'm in a comatose state like this. Let's say a child's in the fourth grade and they've just been extruded from the last foster placement because they had their little honeymoon period, and since they came from a domestic violence setting with lots of chaos and threat, that's the way they felt the world should work, and that's what they feel comfortable in. They didn't like this consistent, predictable stuff at that foster home, so they provoked chaos, threat, and finally got that foster family to extrude them. Now they're in a new school and they're in a new foster home, and they've got a wonderful, loving, empathic teacher with a big sphere of concern whose heart gets tugged when she sees this poor, little foster child who has just come into her class. The teacher thinks, "He's behind, I'll help him."

Why is he academically behind? Well, because for the last three years he's been sitting in class in a state of high alarm and he's only been inefficiently acquiring cognitive information. He's now, basically, two grade levels behind. Why is he put in the fourth grade if he's behind two grade levels? Because we do such a shitty job at assessment that we end up placing these kids based upon chronological age, not based upon where they are academically. We have to let him fail in the fourth grade before we realize he really should have been placed in a different classroom.

Here's what happens. This pissed me off. Here's this little boy over here at baseline. He's in a new environment. Novelty does what? Remember? Novelty makes you a little bit more anxious so he's way over here. He's sitting there in class and he's watching this teacher, and the teacher's watching him. She says, "You know what, I feel bad for you, so every day after school I'm going to spend a half an hour or so and I'm going to help you catch up little by little by little." What happens with the power of proximity when somebody spends time with you and they look you in the eye and they spend individualized, focused attention on you? You know what happens? He begins to feel a little safer and a little safer and a little safer, and in the way that it should always happen, in context of the relationship, he is now available to learn cognitive things. And lo and behold, you know what happens? He starts to learn, and he feels great about it. It's tremendously enforcing. She mirrors back to him how great it is.

She feels good, he feels good. This wonderful thing is starting to happen, that should happen and should continue.

The teacher was not taught about maltreated children, so she doesn't really understand this continuum very well. She does understand how to teach. She does understand how to be empathic. She's kind, she's being there, but she doesn't know what to expect when he's under stress. So tomorrow's the test. She spends a little bit of extra time with him and sort of almost cheats and tells him what's going to be on the test, because she wants him to do well. She knows that he's going to need a little extra help. He wants to do well, she wants him to do well.

What happens when you have a performance desire? It doesn't make you calmer. It makes you more anxious. He goes into class, and he's right here. All that information that he stored is over here in this cortex. Even though it's in his brain, he can't efficiently retrieve it. He opens up the test to the first page and it's like oh this is familiar, I know this, I know this. It's like having something on the tip of your tongue. You know that sensation? You have that on the tip of your tongue and you walk away from the interaction and you're sitting in the cab and you go oh that's the name, that's the book I should have told that person. I'm going to be halfway to Calgary and my brain is going to say oh the name of that book, I can't believe I couldn't remember the name of that person. This is what happens to him.

He finally quiets down enough so he starts to write down the answers. The problem is when you have difficulty retrieving this information you're slower in the way you respond. He is, he's starting to feel better, he's doing okay, he's getting the right answers, and the teacher goes up to the board and says, "Five minutes left." He gets more anxious. He frantically goes, "Oh no, oh no." He's so panicked, that he can't actually get anymore information out, and he's almost paralyzed.

Now everybody in this room has been in that situation. You come back from a holiday and you go to your office and you've got people saying, "We have this meeting, we've got to do this, you've got to return this phone call, they called, and they're really mad." Your editor says, "Your book was due eight years ago." Well, I guess, eight years and one day ago. So, what we do? We're adults, so we tell everybody to go away. We shut the door, we take the phone off the hook, we sit down, and we quiet down. Then we sort and organize what we have to do. If you're a child, and we're in your face, giving you all this stuff, you're stirred up, you freeze, and you don't do what we tell you to do. You don't pick either one of the choices given to you: do this or do that or don't just stand there and look at me. You know what we call these children? Oppositional defiant.

So here's this little boy. Here he is, sitting there, in the class. In addition to having changes in cognition when you are under threat, we have changes in behavior. We have changes in the way we feel. This slide illustrates some of the changes in behavior. So here's the child in the alarmed state, he's a little bit more anxious, he's been told that he's got five minutes left, and he's sort of frozen. Teacher says, "All right, test is over, put your pencils down."

Now, of course, the teacher's been sort of balancing this whole thing between this special attention she's showing the child and the way other kids are reacting. These kids in the class know this. They know that she's been giving him all kinds of attention. Here he is sitting in the front and everybody puts down his or her pencil and here he is with his pencil in his hand. The teacher doesn't quite understand this. In fact, she's thinking "My time and effort. I go way out of my way to help you and look at this. You're making me look like an idiot in front of these other kids, and you are making me interact with you in a somewhat aggressive, hostile way, so put your pencil down." Now his brain is over here. He doesn't even hear words. It's sort of like Snoopy or Peanuts. He doesn't know what's going on. He tries to flee, because he feels more threat from somebody stepping towards him, raising her voice. He crumples up his paper and he tries to get out of his chair, and the teacher goes, "Oh no." She puts her hands on his shoulders, and pretty soon you've got a combative, aggressive interaction that deteriorates into a fight.

This teacher is so upset that the next day she writes a letter and says this kid has to go into a special education classroom for behaviorally disturbed kids. Because listen, I went out of my way, I spent 30 minutes a day for almost 2-1/2 months, and he ended up attacking me. There's something wrong with this child. Because of that, we end up taking this child and instead of putting him in the second grade where he could acquire some cognitive information we put him in a learning environment where there are seven other children who had equal reactivity and impulsivity. We have one teacher and one aide who are basically playing the role of lion tamers, and none of these kids learn anything. Then he's basically, because he doesn't learn anything, he stays in the foster care system and he burns out one place and then another place and then lo and behold he gets to be 18 and he ages out of the system.

You know what happens to kids that age out of the system here in California? I wouldn't have believed this if Rita Sands hadn't told me this just three weeks ago. They did a study and they followed kids that aged out of the child protective system. One year later 63 percent of them were dead or in jail. That's what happens to these kids. So, when you're interacting with them and you want them to acquire information, you have to not only know their developmental stage, you have to know their internal state.

Some of the most common mistakes we make in therapy and in education and in any kind of caregiving is that we misjudge where children are in this moment. We may think that they have the developmental capabilities to master this opportunity that we're putting in front of them. Yet, because we've misjudged so dramatically what they can do, we'll end up putting them into a situation where they will predictably fail. This is another one of our huge problems clinically. If we do get their developmental stage right, and they are capable at some point of mastering this, very often we will misjudge their internal state. They're not ready right now to master what we put in front of them. If we don't know the developmental stage and we aren't sensitive to their internal state, we're going to be tremendously inefficient at teaching them social, emotional and

cognitive things. One of the major mistakes we've made doing our clinical work is that we didn't understand this.

Remember that drawing of the boy who was 14 years old? He had spent 18 months of his life, the first years of his life, seven hours a day, five days a week in essential deprivation. What happened to his whole history of therapeutic interactions where he didn't make any progress? Let me tell you what we did with this child, clinically. First thing that we did was that we took him out of his current therapies. The one therapy that he was in was an inside-oriented psychotherapy. We have nothing against that. But, he was at that point developmentally not capable of benefiting from an analytically-oriented, inside-oriented psychotherapy. He was also, because he had these bizarre social skills, in a social skills group with about eight other teenagers. This is a kid who hadn't even mastered a dyadic relationship with anybody besides his mother and they were using that as a therapeutic intervention, which was clearly a mismatch between where he was developmentally and what the expectations were. We took him off of all his medications. We convinced the mother that what he needed actually was to have a set of developmentally appropriate and developmentally sequenced activities to try and express untapped potentials in his brain.

We recognized that the brain develops in a sequential way. The development of the brainstem and the healthy development of the brainstem helps facilitate the healthy development of the  $\overline{\lim(?)}$  brain and the healthy development of this and that and so forth. There's an appropriate sequence in the acquisition of memory and an appropriate sequence in the acquisition of skills. If your therapeutic interactions were focused up here, and this part of the brain was poorly organized, you're basically swimming upstream. You're going to make some changes here, but you're always going to get the interference from what's going on down here. So, the first thing you need to do is go down here and provide activities that change the brainstem and help build in the capacity to tolerate touch and the capacity to regulate the brainstem, which was one of his major problems.

I know this sounds very crazy, obviously not to this group, to other groups, but you should see when I talk about this to my child psychiatric colleagues. They're like, "Huh?" We stopped all the medications, we stopped all the therapies, and we said to the mom, "We want you to go learn how to give your child a massage. We want to do Reiki touch and we want to do massage therapy to start with." It took me a long time to convince the mom that I wasn't crazy. A big part of the work here was helping the mom say, "All right, listen, stick with this, give it a shot, try it." We started out with this mom.

Did I tell the story about the diapers-- changing the diapers? Touching this child was the equivalent of the introduction of a new tactile stimulation, sort of analogous to what happens when you first have your diapers changed. A whole set of neural activity that's external and foreign. He interpreted it as bad, as threatening. So what we did, we took his hand and put it on his other hand and stroked his hand. It got to the point where he could tolerate that and we followed that by following his heart rate. As soon as his heart rate stayed the same whenever we did this, then we brought mother's hand. We

brought mom's hand in and his heart rate would go up a little bit, but not too much, just a little bit. Then it got to the point where his heart rate wouldn't change when he tolerated that. Then we'd move up the arm, and his heart rate would go up a little bit and then it would come to the point he could tolerate that. We went through process of progressive desensitization. We call it desensitization. The truth is we weren't desensitizing anything. We were building in new memory. We were putting new things into his head. We did this, got to the point, and it really only took six months, to the point where he actually enjoyed being tolerated and touched by most people, and enjoyed being touched in appropriate ways by his mother. He liked to have a back massage.

When he came into my office he was a little odd. He came in and he wanted to touch my hand. I knew that it was time to sort of move to the next developmental stage. We put them in another one of the cutting-edge, high tech, amazing, genetically mediated, (inaudible) therapies—music and movement. It was so funny because psychiatry is now sort of obsessed with genes and with all this biological stuff. When you talk to your colleagues who are sort of entranced with this translocation of some chromosomal site, about how we get these remarkable therapeutic changes by helping kids learn how to clap, they're like, "Huh, what happened to you? Have you been smoking pot?" "No. We're trying to figure out how the brain works." So we put this child in music and movement, and I can tell you right now if you have a child who you work with who cannot keep time, they're not going to benefit from an insight-oriented, talk-focused therapy. You've got to go down. You've got to go down, do things that influence this part of the brain and get them contained and appropriately regulated before you get up to this part of the brain. We put him in music and movement and it got to the point where every time he'd come in to see me, every couple of months I'd turn on some music and I'd say, "All right, let's clap, Let's dance, Can you dance?" When he got to the point where he could dance about as well as the average bad white man, we're not talking a lot of rhythm here, we're just talking the ability to at least keep some beat, then I knew that he was ready for dyadic interactions.

It started out he'd come into my office, sit and do his homework, and I'd do my work. He would sit closer, then he'd sit even closer, and pretty soon he'd sit even closer. He'd sort of put his work down, and he'd kind of look at me. Sometimes he'd come over and stand by me. At one point he finally said, "Listen, what are you doing?" I said, "I'm working. What are you doing?" He asked me, "Therapy?" I said, "Really? Do you want to talk?" He said, "Oh no." I said, "Well go sit down, I'm working." A couple more sessions later he came in and said, "Well, I'll talk. I'll talk." At that point, we sat side-by-side, and we would have conversations about things.

Finally we got to the point where I said, "You ever wonder why you're coming here?" He said, "Yeah. Well, I know that I don't work right." I said, "You ever wonder why you don't work right?" He said, "Yeah, well..." And, I said, "Well, let's talk about it." I literally gave him a little lecture about the brain and how it grows and how we experience. I said, "This is why we're doing this stuff." And he said, "Well that makes sense." He had significant cognitive strengths. They were splinter skills, he was great with numbers and

he was not so good with English, but he was passing. I explained this to him, and he understood it, and he said, "Well that makes sense, so what do we do next?"

I said, "Here's the deal. We're now moving into an area that's going to be really hard for you. It's all about relationships." He said, "I know. I don't know how to do that." I said, "I know you don't. You're terrible at it." I said, "We've been sitting here this whole time and you've not once looked at me." I said, "In the normal world, people won't tolerate that. I tolerate that because I get paid to be with you." I mean let's tell the truth. I mean I would do this probably if I didn't get paid, under certain circumstances, but the fact is this is an artificial relationship and I'm an adult and I tolerate all this crap, because that's part of my job. It's not the job of a friend, of some kid in your class to tolerate your rude behavior when you come up and grab something in his shirt because you think it's shiny. I talk with him. I know it sounds sort of a little bit harsh, but I talk with him and he'd go, "Oh, okay."

I said, "Here's what I've got to do. I've got to teach you how to engage with people in ways that are more appropriate." He said, "Okay, let's go." I said, "Well first thing, try looking at somebody in the eyes when you talk with them." So, he would do things like stare at me. And I'd go, "Wait a minute, you've got to look away too." He did these real robotic movements. I said, "Well, you can look away without moving your head." So, he'd roll his eyes. I thought, "oh geez." It really taught me about how incredibly complex and sophisticated nonverbal communication is. Little by little we got him to the point where he actually, from a distance, looked like he was doing appropriate things.

Then we put him into parallel play with a peer, like a social coach. They just sat there these two socially inappropriate guys, and they kind of geek into each other once in a while. Finally it turns out that they both liked to play with these little characters that were sort of the kinds of things you'd play with if you were interested in Pokemon cards. They weren't Pokemon, but they were kind of like that. At this point he's 16 years old. They would play with these cards, and they connected, and they sort of had this engagement. Little by little they sort of got more comfortable with each other, and that generalized out of the office. They had sleepovers and had friends, and they kind of attracted a couple of other geeky friends. They created this little group of people that sort of stumbled through high school. They did okay.

This kid is now in college and going to be an accountant. Which I did my best. About a year-and-a-half ago he sent me an e-mail that said, "Next step—girls." Of course I immediately sent him back an email and said, "Wrong guy." This is one of the first children that we worked with where we truly abandoned completely the conventional medical model for our work and tried to do this developmentally sensitive and developmentally appropriate sequence set of activities, most of which were not conventional therapy and it turned out very well. We've done this with eight or nine children who had similar significant delay, and they've all made comparable progress.

One of the other things that we've done in our work clinically, that I think might be of interest to some of you, is that we have completely changed the way we conceive of

how to spend our time. Now the conventional model was that somebody would have a child that would do some behavior and disturb the adult world. Right? Because of that, they would be brought into the mental health system, they could come and see me, or somebody in my group, and they would sit and they would have an hour or hour and a half with us every week or sometimes twice. Somehow as a function of that interaction there was supposed to be change within that child to make them emotionally, socially or cognitively more appropriate and healthy and mature and blah, blah.

Knowing that the brain develops and changes as a product of use, and adding up the one hour a week I would spend with the child, and comparing that with the hundreds and thousands of other hours of the week, I was thinking, "Gee, I'm going to have to be pretty good at this to make a lot of change because my one hour is going to have to have a lot more influence than all those other hours." Taking that understanding of how the brain changes into consideration with some of the experiences we had working with the Branch Davidian kids, and some of the things we were learning working with Native American populations, I began to realize that our entire concept of how to create therapeutic environments was flawed.

Let me just describe this chart and where our thinking evolved to over the last eight or nine years in this work. When we first started to work with the Branch Davidian children, they were all living in a single cottage, and there was complete chaos. They had no schedule, there were people coming in and out of their lives: FBI, Texas Rangers, etc. It was just a mess. We came in and everybody was saying, "Oh, they need therapy, you need to do therapy to these kids because they've been traumatized," and "the evil David Koresh did all this bad stuff." You need to undo that by doing therapy and whatever. Even at that point that idea sort of didn't fit with what I understood about people, so I said, "Listen, why don't we bring some order to their day, we'll make a structure, make a schedule, bring some predictability, bring in some psychologically sensitive people." We created this environment where there were between 12 and 14 adults who worked with me who were basically creating this environment over the day for these kids. We didn't do any therapy. At the end of every day, we'd sit down after all the kids went to bed, and we would staff these kids. I would find out what happened during the day, what kinds of interactions were taking place.

This is one example of a contact for one child who had interactions with ten different adults in my group over the course of the day. What happened throughout the day was that this child approached the adults and had some form of therapeutic interaction. It might be a two minute long thing, five minutes, or even half an hour. But, it had the elements of the child having control of the process of establishing connection by deciding how intimate, how deep, how long you stay with this content, and then having control over backing out and moving away. An example might be at breakfast one of the kids would come up to one of my staff and say, "What do you think is going to happen to the compound?" My staff member would say, "Well, I think they're going to get out and everybody's going to be okay." The child would say, "No, I think they're all going to die." The staff would respond, "Why do you think that?" And the child would say, because A, B, C and D. The staff would then say, "What are you thinking? You must feel pretty

lousy about that." And, the child would just get up and walk away. Sometimes the interaction was that short. Other times it was that the child just wanted to come over and sit with somebody, sit on their lap. Sometimes it was large motor play. They wanted to come and literally physically touch me and roll around.

The wonderful thing was, in this collective group of people we had, there were people who were very, very good at telling stories, people that were very, very funny, people that were very, very nurturing, and people that were very, very structured. There was an array of strengths that was present because there was an array of people. I was the person that was sort of the large motor play person. There was one time, for example, when I was sitting on the front porch and talking with a couple of FBI agents, they've got their suits on and they're kind of fancy, and I'm just trying to tell them some stuff, and I'm kind of scruffy. All of a sudden you hear a scream in the background. This child would go, "Ahhh." They'll jump on my back and they'll wrestle me around, and we'd go in the front yard and toss each other around. Then the child just gets up and runs away. I'll go back and sit down sweaty and it's hot and the grass in my hair. I'll say, "Okay." The agents would look at me like what in the hell was that? I said, "Oh, oh that was therapy." It took a while for them to sort of figure me out.

What we found, however, was that by the end of the day, these children, despite the fact that we had no formal therapy, had been able to have more than 2-1/2 hours on average of therapeutic interactions. This led to the concept that we're now using and promoting significantly in our work in creating a therapeutic web. We went back and looked at the children that we worked with and found some very, very sobering things. One was that there were children that we'd been working with for years who had basically plateaued. They weren't getting any better. W tried all kinds of different things and they just wouldn't get better, no matter what we did. When we looked at their life, what we found was they had poverty of relationships.

Then there were kids, this little girl I described who had a dissociative response who was sitting on the couch. Talk about a significant trauma, having one parent murder another and then kill themselves in front of you. This child was in treatment with us two days out of the week for about three months, then one day a week for another three months, then once a month for another three months, and then basically now we see her once a year. She's great. She's one of the healthiest kids I know. It's because she had aunties and grandmas and grandpas and a very, very sensitive school and lots of friends. We went out and we educated them, and we told them about trauma, we told them what to expect, we told them not to over-pathologize, we told them how to respond to specific situations. We increased their capacity to do the right thing. We created this therapeutic web. We ended up sort of like being the conductors of an orchestra. We didn't play any instruments. We just told people when to bang their drum and when to do the other things. It's a concept that we use to this day, and it's been very, very successful.

I have to say it's been sobering, because some of the things that we thought were really, really helpful for kids turned out to not make much difference at all. I hate to tell

people this, and I'm sure you probably know, but getting the right diagnosis means absolutely nothing. I mean it has absolutely no bearing on anything. Getting the right history has everything to do with it. If you understand what the history of a child was, and understand how they live now and what their world is like, it makes you a much better clinician. What we started to do is that when we start our clinician work, we actually go to the child's home and community. We don't make these people leave their social matrix to come to see us. We leave our social matrix to go to see them. What happens is we form meaningful, real relationships so they begin to connect with us, and then at some point when they ever do come to our clinical setting, they feel safer. They realize that we went out of our way to come on an evening, away from our families, to come and help them, so it doesn't feel like such a huge burden for them to take a little time off from work to come to an appointment on a day. The no-show rate at our clinic is 3 percent. Most mental health clinics with high-risk kids have a no-show rate of about 50 percent. We have people that call us and are so upset that the bus broke down. And we're like, "Don't worry about it. It's no problem." But they feel terrible that they let us down and it's all because we formed these respectful relationships.

The other thing that we do, and I talked about this to some people, is that when an adult brings the child into our clinical setting, we never make that adult sit in the waiting room. We will always have them meet with a member of our team for history gathering, support, psycho-educational or actual therapeutic work. When these people have their needs met, they are better parents, and they're more connected to us. And you know what? They're more willing to listen to the stuff that we have to say that's painful. I know this sounds crazy, but we have a videotape of this. We have a videotape of a woman that we worked with for a very brief period of time, and it became clear that she was incapable of caring for these kids. This has happened several times. We actually sat down with her and we said, "Listen, you know and we know that the best thing for your kids is to have somebody else take care of them right now." Instead of having this huge confrontational thing that we do with CPS very often, we rush in and yank kids out of homes, this woman cooperated and agreed to do the separation. She was the major source of comfort for these children about the transition. The beauty about this process was that she was able to stay actively involved in their lives in a healthy way. Once she got her stuff together, she was able to then be an appropriate part of these children's lives, even if she couldn't be the legal guardian and the primary caregiver.

What we need to recognize is that you cannot have 20 in-office sessions to reverse years and years and years and years of mess. One of the major impediments to the effective creation of clinical policy and practice that will help children is the medical economic situation. The medical economic model currently, doesn't pay for things that are nonconventional. Things that are conventional, it pays for 20 sessions at a rate that basically puts people into poverty, and is a national shame. The United States, as I'm sure all of you saw in a recent survey, done by the World Health Organization, of all of the westernized countries, we do the worst job providing mental health for our population.

We are really in deep trouble with trying to figure out how to fund appropriate mental health services for children. Let me give you an example of how difficult this can be, even when you have data to prove outcome success. In a synopsis of this little study as published on our Web site, for anybody who is interested. When we were first starting out with this music and movement stuff, there were people in my group who said, "Hey let's go to this..." We wanted to go to this therapeutic preschool, public preschool in Houston, where children were admitted because they were high-risk and developmentally delayed. Every single one of the kids that went into these systems ended up in special education. We went in to these pre-K settings and we did a developmental assessment in multiple domains and found that the average developmental percentile that these kids were in was between the 5th to the 7th percentile in a variety of speech, language, motor, and all that kind of stuff. We then instituted and put into this classroom a 12-week music and movement class that met three times a week for one hour. One of the sessions was with the family-- a caregiver had to come in. So, basically we had 36 sessions, and they were just conventional music and movement.

Four weeks after the end of the study, we re-administered these developmental tests, and lo and behold these kids had gone from the 5th percentile or 7th percentile, up to the 43rd percentile. We didn't think it would happen in speech and language, but when we went back and looked at it, it made sense. The bottom line is in every domain these kids got better.

We went back and first of all nobody believed this, because it didn't seem to make sense. When you think about how the brain works, it's very plausible and it makes neurobiological sense. I said, "Fine, repeat it if you want to repeat it." We repeated it and got the same result. Then we went to the public schools and we said, "Hey, we've got this great inexpensive way, you don't have to use doctor level clinicians you just use these people that know how to do this music and movement stuff and a little bit of supervision, and lo and behold you can divert children out of the special education system. Incredible savings. The public schools go, "Hmm, you know, we don't have a budget for this stuff in our music department." What? This isn't music. We went back and said, "Okay, okay. Here, let's explain this again." We went through three different alliterations and the person who was the head of the school district when we were doing this, is now the head of the Department of Education for the United States--nice guy but just didn't quite get all this stuff.

The public education system said, "We're not going to fund this." We went to Child Protection and said, "Hey listen we've got a great way to divert kids out of special education, 50 percent of these kids end up in the Child Protective system, so why don't we do that?" They said, "No. We don't have money for that. That's not our mission." Then we went to the mental health system, they were worse. They said, "Oh well if they don't have a DSM4 diagnosis, we can't even provide services." "You're telling me that we have to spend money to send a clinician in to do an assessment to get them a DSM4 diagnosis and then you'll pay for that kid to get the service and not for all the

other kids, even though the exact time and effort and energy to do it for one kid is the same as doing it for 30 kids?" "Yes, that's what we're telling you." "Oh, okay."

The mental health system wouldn't fund it. We went to local foundations that said this is a great idea, why don't you get the public systems to finance this, because it's their mandate. We couldn't find anybody who would take responsibility for these kids and fund it. Right now we have this incredible model, very easy to administer thing that helps divert kids out of the special education system, makes them develop in a more mature way, and nobody will fund it. Go figure.

#### (INAUDIBLE QUESTION FROM AUDIENCE)

That's exactly right. What turns out to be the mutative agent wasn't that hour in the office or in the school, it was that these parents learned how to be with their children in a way that was fun. They both liked it. It was a way to be positively interacting, to use words, to sing, and all kinds of things. It helped these parents engage in a way that wasn't somebody saying, "Oh you're a bad parent, and what you need to do is look in the eyes of a child, and if you're a good parent you'll do this and this." We didn't say anything about parenting. We just said, "Hey come and hang out and dance, it's kind of fun." They liked it, their babies like it, and pretty soon they were doing all of this stuff. There was one time I drove up and I was going to go watch this, and I saw this mom and this little kid get off of the bus, I was in New Orleans, they were doing this little dance into her pre-K. It turns out that was one of the things that they'd learned, one of these little step patterns that they'd learned in music and movement. They were sort of always goofing with each other, using this little thing.

### (INAUDIBLE QUESTION FROM AUDIENCE)

Could I comment on current EMDR? Yes. There are a number of therapeutic approaches that I think are very effective that are not going to be easily funded or easily accepted. Things like music and movement. One of my favorites, actually, is helping kids who have attachment problems by using animals. Kids who have attachment issues and don't know how to form relationships, burn out peers in an instant. So they don't have any basis to learn. You need to have sort of this absolutely, completely accepting, and forgiving entity to interact with for you to learn the rules of relationships. Under the ideal circumstance, that would be a caregiver or parent. Yeah, you make all kinds of mistakes. Yeah, you poop all over them and you burp on them and you vomit on them. You wake them up in the middle of the night, and they're still there, right? As you get older, you need that sort of thing when you have attachment issues. Somebody who is going to tolerate the fact that you're rude and inappropriate and you poke them and you hit them and you spit at them and you say nasty things to them. You know who does that best? Dogs. These kids learn some of the basic rules of connecting to another living thing with animals. It gives them some of the rudimentary skills that they can then generalize into some of these beginning relationships with people. Those interventions are tremendously helpful for kids who are older who have attachment problems. But again, can you get those funded in the conventional mental health system? No. There

are a lot of somatisensory integration models where people use touch, there are different labels to it, but it's all kind of the same thing. These things can be tremendously useful in helping children who have been neglected or who have traumarelated problems. You can't get those very well funded.

I hate to say this, but I think one of the best therapies is not therapy. We were interested in the development of post-traumatic symptoms, and what we found was that we needed to follow kids after a traumatic event to figure out what happened, how they got better, and was there anything we could do acutely to make them get better. We did this study at a large pediatric hospital where kids would come in and they were injured. They were shot, stabbed, in a car accident, and they'd been traumatized. We put them in one of three groups. The first group was we just got consent to come and evaluate them at six months. The second group was that we gave them about an hour-and-a-half of psycho educational information about trauma and the normal traumatic response and what to expect. The third group was that we gave them this information to the children and to the families and then we put them in weekly psychotherapy. We thought, of course, that therapy would be good for these kids. Here's what we found.

In the first group were absolutely nothing happened, 37 percent of them had PTSD at six months, which is very comparable to what you find in other studies. The second group, the group that had therapy and psycho education, what we found was that these kids had PTSD at a rate of 21 percent. We were thinking, "Hey this is great." Therapy helps decrease the development of long-term trauma symptoms. The third group that we just gave information to, told them what the normal post-traumatic stress response was, and we also gave them a phone number to call if symptoms got to some threshold. We told them what the warning signs and what to worry about. That group had PTSD at a rate of 11 percent. Our therapists didn't believe it because they're good-- they really are good. They said, "Oh, that can't be." Kids don't get worse by having therapy, how can that happen. We said, "All right, let's repeat it again if you don't believe it." We did it again, found the same result.

Lo and behold, what did we find out? We found out this. We found out that when a child is dealing with trauma, if they have a healthy social network, they will seek out people, ways to deal with it, and cope with it in a pace and in a style that fits their emotional and social topography. If they have this healthy social network, going to therapy tends to be intrusive. In talking to these kids we found out that they'd say every Wednesday I'd have to come up with some excuse about why I couldn't be at soccer and I knew that I had to start thinking about talking about it. It turned out that therapy was at times an evocative cue. It disrupted their normal healing opportunities.

The interesting thing was when we went back and looked at the kids that had good social networks, therapy was intrusive. Kids that have poverty of relationship, therapy was helpful. When therapy was adding to the relationships they had during a week as opposed to breaking the number of relationships, it made a difference. This again means that you talk to a child, you find out about the circumstance, you figure out what risk they're at based upon social emotional poverty or not. If they have that, then you

need to put in some more aggressive therapeutic interventions. If they don't, let them go. Give them information, tell them where to come if they have problems, and let them go.

## (INAUDIBLE QUESTION FROM AUDIENCE)

I did not write it up because honestly I did not want it to be used by insurance companies to justify nonpayment of the treatment for PTSD. I don't need another paper on my CV, but I do need people taking care of these kids. Thank you for your attention.