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Presentation Transcript
Understanding Human Behavior – Part 2
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The title of of today's presentation is *Understanding Human Behavior, Part 2*.

Last week we talked about a little girl who comes to see me and, you might recall, she appears to have a really difficult time controlling her activity level, her moods, her emotions.

This past week her mother took her to the doctor – actually she took her to the University Psyche Hospital – to get her ADHD medication. They're complaining at school that she's not focusing, so.... They were going to try to go without it, but she's been talked into going back on by the school system.

While she was there she got angry at the doctor and cussed a blue streak at him. So the nurse – I think it was "Nurse Ratchet," actually – told her that if she was going to talk like that, she wouldn't get any candy afterwards – I'm all for that – that's not the ratchet part. That statement by the nurse started World War III, apparently, from what mom told me. This little girl got so out of control it even frightened her mother. She said, "I couldn't take her home in that state." And they couldn't have her there because she was disturbing everybody – yelling and cussing and screaming, kicking furniture, and trying to bite people, and just went completely wild. Her mother said, "You would not believe what was coming out of her mouth!" And this is a very *small* third grader! So they had to do something – they said – so, of course, they did what they always do at the physhe hospital. They restrained her and gave her a psychotropic medication – Risperdal, in this case, which is an anti-psychotic – and told her mother that they would keep her there for up to eight days. She's experiencing what happens to a lot of kids in our country that get completely out of control. I mean, I've seen this happen so many times. They're going to diagnose her with bipolar disorder, depression, maybe ADHD. She'll probably come out of there on four drugs. And she'll get that out of her system in a couple of months, if they don't keep her on it. And she'll carry with her a sense of abandonment and betrayal by her mother. The mother is really torn, because she has other children who don't need to be exposed to that kind of behavior at home, but she doesn't believe in drugs either. She doesn't think they're the way to go. So she's kind of in one of those ambivalent places where she's caught in a bind.

So that experience that I had this week with her family underscored for me the importance of understanding more about what's going on there – how the brain works – so that we can understand what we're seeing when we encounter behavior that's outside the norm.

So today we're going to continue our series on *Human Behavior*. You might remember that we're covering six principles of brain function. The one was that *the brain is organized in heirarchial fashion, with input coming into the lower parts of the brain first.* We learned, too, that they also develop first.

An infant's negative experiences are stored as memory, but they can't be accessed later by thinking, because the rest of the brain wasn't developed yet. And also because those experiences are ocurring in a part of the brain that doesn't think – ever. So that part of the brain only reacts.

So we might draw our attention back to this eight-year-old. Something obviously set her off. And she probably doesn't really know what it is. You know, the fact that you can't have a lollipop is not really logical grounds to go ballistic. So she probably doesn't really know what happened to her either. But something set her off. It was in that part of the brain, most obviously. Thinking had stopped. She was just reacting to something. But it *wasn't* the fact that she couldn't have candy.

We saw how it worked last time. Patterns are formed early and incoming material is compared to those patterns. And when it looks and feels like threat, then we become overstimulated and go into that mode.

By the way, I was taken to task after the presentation last week for going too rapidly through the various parts of the brain and what they do. So I'm going to do that again a little more slowly. In fact, I'm going to do it twice – just so that everybody has a chance to get it.

The first part that we talked about was the brain stem. Then following that, the diencephalon. We haven't really distinguished yet the difference between the two that much. But they control the simplest things. And they also have the fewest cells and take up the least space. They're the smallest. So they do the simplest functions. They make sure our heart is beating, our breathing is bringing in enough oxygen, our blood pressure in the right range, our body temperature is where it should be. All of that – they call it autonomic – is controlled outside of our thinking – except for our breathing, which is autonomic unless we're thinking about it. Right? So the brain stem and diencephalon regulate all of those things – blood pressure, sleep, appetite, the state of being that we're in – whether we're in heightened alert or very calm and relaxed – motor regulation. When you see somebody that is really agitated, a lot of times you'll see a lot of motor activity – twitching, and fidgeting and that kind of thing. That's all controlled in those two parts of the brain – the brain stem and diencephalon.

Then the next one we talked about was the limbic system, which regulates emotional reactivity. So this little girl that was having this big emotional outburst...her limbic

system was not controlling that, but it was being affected by what happened in the brain stem and the diencephalon. Because, as we learned last time, those patterns that get laid down are actually spread all over the brain – in the feeling part, the thinking part, the hearing part, the auditory part – hearing and auditory, that's the same thing, isn't it? – the seeing – visual – all those things – stored in different places and yet connected to form a pattern of experience. And when the pattern kind of matches up with incoming stuff, then it causes a reaction.

Then the neocortex regulates affiliation – our connectedness to the world – our relationships, concrete thinking, and also abstract thought. And that's the biggest part of the brain, because that has the most complex activity.

So now we're going to continue on to the second principle of brain function. Principle two is that *neurons, or brain cells* – those long, long, long, long things – like two miles long – and millions of them – each one with ten thousand connecting points – *and neural networks* – networks of brain cells – *change in a use-dependent fashion*. Use-dependent. We'll talk about what that means. What that really means is that the brain is changed – its size, its shape, its structure – by experience. What happens to us becomes us, in effect. If a child is spoken to, for example, when it's time for that part of the brain to start developing, then the parts of the brain that are reserved for speech, will start building those networks and connections between cells and even grow more cells into that area. They can look at these brain maps and see kids that haven't had a chance to speak, and there are big gaps in there – where there is *nothing* in there, because they haven't used that part of their brain – it hasn't filled in and grown in there.

So if a child is spoken to, for example, then all those networks get built and speech function will develop normally. So it's *use-dependent*. It depends on whether it's used or not. If a child is *not* spoken to, then that part of the brain isn't going to develop. This is true – they're finding out – for *all* parts of the brain and *all* human functions.

To develop normal motor function, a child has to be able to move around. I mean, that doesn't sound really too hard to understand, does it? We're really only talking about things that we all kind of understood anyway, but now we're understanding *why* these things happen. And the implication of why are pretty huge.

To develop emotionally and socially, a child needs to have attuned, attentive care and a lot of relational experiences for normal brain development. I met a girl once – years ago – who, until once she was twelve, thought her name was June Bug. She was neglected, mistreated and made fun of all of her life. She was socially and emotionally delayed in her development. So to develop normally socially – when it's time for that to happen in a child – they have to receive input and stimulation for the development to take place. And if that's missed during that time, it's just like pulling teeth the rest of their life to get what they need.

We've seen people that didn't learn to talk when they were ready to. Sometimes they *never* are able to really speak that well after that.

Another thing that we know is that patterned, regular activity lays down those networks in the brain. That's what causes the growth. Patterned, repetitive, positive activity that is developmentally appropriate – that means it's there when the brain needs it to because it is ready for it – that promotes brain growth and organization. The brain is organized. And the way it gets organized is by this repetitive, predictable, regular activity that builds pattern after pattern of similarity. So, there again, we see that use-dependent thing. They're using their brain and those networks are going to grow.

Chaotic, irregular experiences create chaotic and developmentally delayed brain growth. If it's not used regularly, it won't grow. The patterns will be weak.

So a child exposed to consistent, predictable nurturing and enriched experiences is going to develop brain function that will increase their chances of happiness, health, productivity and creativity all the rest of their life.

I've told about my grandchildren – visiting them when they were toddlers, and being up early, before everyone else, just sitting in the corner of the family room watching what happened on a normal day at their house. I could hear them in the other room after awhile – starting to make some noise. I knew they were awake. They were in there kind of jabbering. Pretty soon dad comes downstairs and he's dressed – I'm sorry, he's *not* dressed. He's in his PJs. He goes in the kids room. He greets them. He talks to them. He picks them up and cuddles them. He changes them. He get them dressed, and brings them out and sticks them in a high chair, and sticks a warm bottle in their mouth in a few minutes. Then they have the bottles in their mouth, and their eyes are going all over the place, watching everything he is doing. He is starting breakfast.

Well, Julie has been up in her bedroom getting ready. So she comes down dressed. She's had her shower now. And she comes down and Mike goes off – up to get dressed to go to work. So their doing tag team on the kids. She fixes their breakfast, and then they eat, and then they're off to do their daily activities.

Well, I noticed, as I was sitting over there unobtrusively in my corner taking this all in, as they started to get down toward the end of their bottles, their eyes drifted towards the stairway, where mom would descend from the bedroom. They knew everything that was going to happen, because it happened the same way every day. And every day their father was the first person they saw in the morning and, I believe, the last one they would see at night most of the time. Even though they didn't see him during the day – they had mom all day – but dad was first and last. And you could tell that they just knew what was going on.

I was observing what was happening there, and how settling that was to them, and how much security there was in that for them – to know that they were going to be taken care of, and just how that was going to happen. When it was time for mom to come down, they looked up. The brain pattern was there. They knew something was going to happen next. And so another pattern was laid on top of that one. And it kind of matches it. So that's where security comes from – and brain growth.

A child who experiences neglect, or chaotic and terrifying environments...that's going to increase the risk for problems in all areas of functioning. *As the twig is bent, so grows the tree*. See, we've always observed that, but now we're understanding how that happens. And when we understand how it happens, then that gives us some clues about what to do about that to undo it.

One of the things that happens is that a child who is exposed to maltreatment early will build networks that cause activations – the fight or flight thing – because of the repeated terror that they experience. A child who is neglected is going to have neural patterns that reflect little or no activation at all.

So when you see a child that is secure and calm and trusting, that means they've developed neural networks through experience, when younger, to tell them that they can trust, and they're not going to be hurt, and the world is a safe place – that they're going to be taken care of. When abuse is the experience, the networks tell the child that they must be on guard at all times, and distrust is heightened, and a state of stress-response is going to be present. And all that's built in *below* the level of conscious thought in a child. They say that when that happens, the child's baseline is raised up above a normal child. They cannot get as calm as a normal child, because they're in a constant state of hypervigilance.

This little girl that I had in my office – the first time that I saw here – I could tell that she was in a very heightened state. And if I had asked her, "Why are you so nervous?" she wouldn't know what I was talking about, because she never gets any less nervous than that. That's just how she is.

So negative experiences create networks of fear and anxiety. And that state of fear and vigilance becomes a *trait* then. The state becomes a trait if it goes on long enough. It's how she *is*. And it started out as a state when she was little, but those patterns were laid down one upon another until that just kind of got built into her. That's how it happens.

So all of these maladaptive behaviors, like this little kid pitching this humongous fit, that always stems from their efforts to adapt to the situation that they were in early on. What are some of the characteristics of that? Well, we said hypervigilance, hyperactivity, impulsivity – can't control themselves (This little kid tried to steal some earrings out of my office. Her mother caught her.) sleep problems – she stays up late at night if her mother doesn't make her sleep in her bed with her. They have huge problems with emotional regulation, as we've seen in the example. Anxiety. She was going to the door every few minutes to see if her mother was out there. So the thought of not getting a lollipop sent her into this terrible downward spiral.

The question that I'm asking is, "Is this coming from a malfunctioning brain – which would be like ADHD – where there's something that is really not working in the brain biologically? Or is it something that has been *built* into her by her experience?" Some might point to the fact that five of six kids in the family were wired like that, too, and were on ADHD drugs, and then finally grew out of it. Others might say, "Yeah, but they grew up in the same home, so that proves nothing." And that's true. They say some kids

grow out of ADHD. Well, some kids overcome being insecure, too. So none of those questions solve the problem. But I don't think ADHD causes a child to go to the door every few minutes to make sure mom hasn't left. That was a big indicator to me. Attachment problems do that.

So we know that this little girl has no father. He died when she was four, I think. He never paid much attention to her before that, so there's a big hole in her life there – a huge attachment issue.

We're learning that the home is loud and chaotic with a lot of inconsistent parenting and sibling wars going on all the time. That's the way she grew up. I mean, when I had those three kids in my office at one time, I was just glad everybody else had gone home for the day, because I'm sure it resonated all over the building even with the door closed. It was *loud*! And that's business as usual in that household.

Now, in the movie, *As Good As It Gets*, Jack Nicholson plays a brilliant man who has an obsessive-compulsive disorder. He locks the door six times, and everything has to be in its place, and he can't step on cracks, and he washes his hands repeatedly in ritual fashion until his hands are red and raw. We learn later in the movie, after we see all this bizarre behavior, that when he was learning to play the piano as a child, his father would smack him on the hands with a ruler if he didn't practice well enough. And if that was going on over music lessons, we're left to imagine what the rest of his childhood was like. He was seeing a therapist, but he could not control the behavior. We know why now, don't we? That got started in a place that was below thinking and before, probably, his brain was even fully developed to think – in his brain stem, where no amount of thinking about it is going to help. But it's also interesting that a caring relationship with a woman, and being able to help her with her son, not only motivated him to work on his issue, but it also helped him to be a bit less compulsive in his personal life. The relationship that he was experiencing with her was *not* like earlier experiences. And it *helped* him. It helped him.

Where you first experience relationship is at the brain-stem level – incoming data. Does it match up with what we've experienced before? No, there's a whole new network put over here that's *positive*.

So let's talk about the implications of the brain being *use-dependent*. By the way, that example of a new relationship and a new network, that is an example of use-dependent. If he starts having other kinds of interactions, those things are going to erode the networks that were put there early on. Because these patterns were put in the brain by repeated experience, that's also the way to replace them with new patterns, because the brain does adapt. It's one of the most adaptable things in the universe.

Now there's a biblical principle that comes into play here. I want to thank Marlene for mentioning this last week.

Rom. 12:21 – *Be not overcome of evil, but overcome evil with good.*

The way you exsponge evil experience from affecting us is replace it with good experience. So if a child has been mistreated, and they can't think their way out of it, they can experience their way out of it. Old patterns can be replaced if enough new positive patterns are built.

I was watching news last night, and they were talking about these dogs that Michael Vick horribly abused. Some people took them on – some experts kind of took these dogs in – and pretty much rehabilitated them. They showed them playing with other dogs. They showed before and after pictures of how they reacted. They were probably mistreated from puppies, but they were getting a lot of love and tender TLC and positive experiences now with other humans, and so the early networks were being eroded as the new ones replaced them. People work the same way. *Overcome evil with good*. That's the principle.

It's interesting the way Paul states this:

V-21 – *Be not overcome with evil.* That's exactly the position that parents, adoptive parents, foster treatment-care parents, case workers, clinicians, teachers – that's exactly the position they are in, because it takes so *many* positive experiences later to replace those early ones that it is *very* hard to stay with it.

Interestingly enough, one of the things that they've found that helps children that have been mistreated – besides early intervention – get them out of that as soon as possible – is a dog! Dogs are really good at unconditional love. So they can have a positive interaction with a puppy or a dog.

Since repetition is a factor, it's not surprising to find that repetitive activities, like rhythmic breathing, drumming, music, dancing, pattern massage, EMDR all seem to help.

This little girl has trouble sleeping at night, so she turns on her radio and dances in her room. She has some inclination to go toward what is good for her. That's why I think she was so interested in being in my office. The possibility of relating to an older man is going to help fill the hole that's left by an absent father – her dead father, actually. And it's so hard, because I see her forty-five minutes a week. The only way I can function in that environment is to look at this kind of work as just seeing myself as part of a team, and that I don't have to do all the work myself – that there are other people on the job, too. I'm just one contributor. So we don't have to bear the burden of this by ourselves. That's so good for the parents to know that, too – to have *lots* of people. The more people you can have involved in the child's problem, the better chances you have of solving the issue.

We also know that any attempt to deal with the upper part of the brain – the thinking part, where you can do talk-therapy and all that stuff – and in the limbic system, where loving relationships take place – none of that can be accessed until the brain stem has been regulated. So I try with these kids to do everything the same way every time, so they know exactly what's going to happen. When they come in, if their upset, they know that they have a place where it's not going to be a high stress deal. There are not going to be a lot of demands put on them. They can pretty much do as they please without fear of

confrontation or judgment. Therapeutic relationship is non-judgmental. Therapists have the luxury of that, whereas parents sometimes don't.

If they're really upset, sometimes I get them to breathe with me, or I get them to listen to their heart or mine. For a long time I had one of these little doctor kits, and they always want to get the stethoscope. I think that's always with the kids that are most agitated. And I think they're going for that heartbeat. Probably the calmist place for these kids was in utero. That's where they had that steady eighty beats a minute. So sometimes we just do that until they feel more like playing or talking. But there's no sense trying to do anything until...the baseline can't get too low for some of them, but as low as it can get.

Okay, that is principle number two – and that is that *brain cells and neural networks are use-dependent*. If they are not used, they erode.

Princple number three. We probably won't get through anymore than this today. But principle number three is that *the brain develops in sequential fashion*.

When a baby is born, their brain is not very developed. They are breathing, their heart is pumping, their blood pressure is regulated. Where is that happening? Yeah, the brain stem, right? That part is developed enough to do those things. But have you noticed that babies can't really get angry right away when they're born, because the limbic system hasn't developed yet. We used to think that was when they are starting to get carnal, but actually, their brain was just starting to work.

So the first thing that starts to develop and become active is the brain stem. Then the next thing that starts to come online is the diencephalon. If a baby is treated well, and they have attuned parents, those parts of the brain develop in a healthy fashion – organized and fully functioning. And if they are not – if the reverse is true – then there is a disorganized hypervigilant pattern – or set of patterns – that is laid down. And that causes disorganized, dysfuntional emotion and thought centers later when the child gets older.

I mean, this little girl's brother came to my office for his visit and he was already upset when he showed up. He wouldn't come into my office. So I said, "Well, I really want you to come in here, because we're going to have a lot of fun. But I can't wait around all day for you to decide, because I have stuff to do. So you've got five seconds to decide whether you're coming in to see me or not." And he stormed out. Well, on the way home, he told his mother he didn't know why he did that, because he really wanted to come in. And he really *didn't* know. But that's all a part of this disorganized, chaotic thing that goes on with these kids when they're in that state. So his mother – bless her heart – she really supported me. She said, "You know, Ed, he *did* want you to come in, but he does not play. You *chose* not to go in there, so you have no one to blame but yourself." She said, "You do get another chance next week." So next week he came in and he was a perfect little gentleman. He knows the rules now. And he and I are going to get along just fine. He had a great time. He's really a likeable kid when he's not in that bad place. So that's my way of making the same thing happen every time. We come in when we're supposed to, we leave when we're supposed to – not early, not late. It's the same amount of time. It's the same place. We do the same stuff. We do it in the same order. So now

that he knows what he can and can't do with me, everything is good. Maybe it will stay that way and maybe it won't, but we'll see.

So, if a baby is treated well, and they have attuning parents, then all parts of the brain develop with those patterns working. If that's not true, it becomes chaotic.

I've noticed that tapping on kids hands when I do EMDR with them calms them down. I don't use the lights, because most of them can't track a light. But I just have them sit with their hands on their knees and I just tap the back of their hands real lightly. Bruce Perry, the brain researcher, thinks that if we tap at forty beats a minute, that's half of eighty, and that's the prenatal heart rate that the tiny brain stem experiences before birth. I pretty much do tap – I hadn't thought about it – at about forty. I don't really think that's what EMDR's doing. That might be one of the byproducts of it, but I don't think it's the main thing. But that tapping can regress a child to a prenatal state of calm to some degree – or at least take them down as low as they can get.

I'm thinking about the little girl again who is over at the psyche hospital today – thinking about what they did. The medical model method of dealing with brain stem problems, which is what she was experiencing is medication. Drug her till she drools and can't do anything else.

Think with me about this for a minute. We are *not* talking about medical problems. We're not talking about physical health problems. We're talking about *relationship* problems. That's what this is all about. So doesn't it make so much more sense to use relationships to repair the damage? Drug companies hate to hear that. Drugs are non-specific. They don't just affect the problem. They affect everything. Results are not – I don't care what you say – are not validated in a lot of these cases, whereas there is a lot of empirical evidence to support attachment and relationship work with children who have been mistreated.

Let's get a bit more specific about how we can think about sequential development and what that means in the real world. Let's talk about from birth to nine-months-old. What part of the brain is growing and being affected – is most active in growth at that time. The brain stem, right? The smallest – they call it *primitive* because it's simple. But primitive is a word that implies older...that has to do with evolution, so I repudiate that term in this usage.

Critical functions that are developing in a baby that is between birth and nine months – all going on in the brain stem: regulation of sleep, fear and arousal states – mostly that's what's going on – are they trusting or are they afraid? Are they calm or are they anxious? Are they in a state of heightened vigilance?

The developmental goal from birth to nine months is a state of regulation, calmness, trust, an attachment to a primary caregiver – to parents, where those people are seen as good at taking care of me and understanding me. They also, at that age, can develop a flexible stress response. Nobody's perfect, including parents, so if they get treated well enough, they learn that when they're *not* treated well, that doesn't mean that they're going to be

forgotten or abused. It just means that it's going to take longer than they wanted to get fed or whatever. So there's a measure of resilience that can be developed there.

Helpful experiences for babies from birth to nine months. The main, of course, is attuned, responsive caregiving, rhythmic and patterned sensory input, nursing, listening to mom's heartbeat, I think rhythmic music – that kind of stuff. That's all good. You know how people talk to babies? Their voice goes in a sing-songy, up and down thing? That's sort of a pattern thing. And babies just start wiggling all over when they hear that stuff, because they need it.

Therapeutic activities. When you have a problem with an infant, what can you do? Well, rhythmic massage, rhythm, EMDR can work with infants, they say. Reiki. A lot of people think that that's a pagan, horrible Japanese thing. And I think it probably started out bad – just like yoga and a lot of other things – but they've taken.... With yoga, they've taken the religion part out of it. I guess Taekwondo and all that stuff all started out as kind of semi-religious. But there was some physical element of benefit there and so people have kind of gone with that over the generations. He's not talking about reiki – the thing that we don't like – he's talking about the healing aspect of touch. Wikipedia compares it to the laying on of hands, which is a healing thing in the Bible – which is interesting to think about, isn't it?

Okay. Let's think about from six months to two years. What's the growing part of the brain there? Well, the most active part is the diencephalon. Critical function is there. Now we're going to specifically define what it does. That's where sensory input is integrated and fine motor control is developed. I can still remember my grandson, when he was nine months old – ten months. He was just kind of moving around – but he was crawling. He's pushing that red carpet fuzz toward his mouth. He had to try three or four times to get it in the right spot. Fine motor control. That's being developed in the next level up from the brain stem – the diencephalon. I was watching him wire his own brain. Those kids at that age...I had forgotten what it was like. I laid on a couch for a couple hours and they crawled all over me. And they'd try to climb up on the couch and look out the window. They were just all over. They just couldn't stop moving. And that's because they *need* to move at that age. So God blessed us with a desire to *do* that when we're ready for it – just like He blesses teenagers with the desire to be independent when they're ready to learn to do that. We don't like it. We want to control everything, keep them safe, but they need to make choices so they can grow. And that's a sermon for another time.

The developmental goal of six months to two years: sensory integration, motor control, relational flexibility and attunement. It's not just trust and feeling secure now. It's attuning back and connecting with mom more – at six months to two years – and dad.

Helpful experiences for this age: more complex rhythmic movement, simple narative, emotional and physical warmth, hugging and all of that stuff that's being developed at that level. So we want to focus on providing that for our children – have discussions, let them tell their stories about what happened. Have you ever heard a two-year-old tell you what happened – what their day was like? They need to do that. And we need to listen to it. Right?

Therapeutic activities: music and movement. My grandkids came to visit. I heard that they had been listening to *Baby Einstein's* videos – that there was a lot of classical music. Ethan seemed to be particularly musical. I knew some of the songs and music that they'd listened to. So they're two years old. They're standing in our family room – just arrived. And I went duh-duh-duh-da-duh, and Ethan goes eh-eh. He knew what was going on. Again, they mention reiki therapeutic massage and equine or canine interaction for kids between six months and two years.

One to four. What part of the brain is growing there? Well, it's the next one. It's the limbic system.

Critical functions for the lymbic system are emotional states, social language and the interpretation of non-verbals from others – to be able to tell if somebody is upset.

I had a little girl with Asbergers that I worked with at school. She was totally clueless about other people's states. She could look at your face, but she didn't know how to interpret that. She couldn't tell when other kids were mad at her or irritated with her. So she proceeded to fixate on Picachu and China. As infantile as Picachu was, her understanding of what was going on in China was...I mean, she must have been some kind of savant. She was so smart. She knows more about China than I'll ever know. And she was only ten!

Normal development. Kids between one and four are starting to interpret non-verbals, and to develop social language to talk, and they're developing their emotions at that time, as we all know.

Helpful experiences: complex movement, narrative and lots of social experiences.

Therapeutic activities: play and play therapy, performing and creative arts – interestingly – and art therapy. Good for kids that young.

So you see what this provides us with. It provides us with a whole arsenal of things to think about and do with kids that are having problems at whatever stage we encounter them.

Then three to six. There's where the cortex starts to grow.

Critical functions there: abstract thought and social and emotional integration. That's where they start to learn *how* to be with other people in the world – how to be a social being.

Developmental goals are abstract reasoning, creativity, respect, moral and spiritual foundations. So there's definitely something spiritual going on in the human mind by the time they're three-years-old for most kids.

Helpful experiences for that age group: complex conversations. If kids are telling their stories, it's good to kind of talk to them about it and interject thoughts a little bit – not too

much – and to ask questions – kind of challenge them to say more. Also, solitude, satisfaction and security – to experience those things.

Therapeutic activities for three to six: storytelling, drama, exposure to performing arts, formal education. School is good for kids. We have traditional, insight-oriented therapy that can be conducted with kids that age and cognitive, behavorial therapy that works with them.

Parents see me with the the sand tray and the play therapy, and they hear us in there playing the radio, and throwing pillows around, and playing games – card games and stuff – and they think, "Oh they're just...." You'd be surprised what comes out. When they're ready, stuff happens. And the parents are always agitating them before get there. You know, all the way over in the car, "Now you be sure and talk to him about this or that." And they do that when they're jolly well ready, because they know that they don't have to when they're with me. But they *do* when they're ready.

So let's think about the little girl again. She's eight and she's still tantruming. She's not learned respect. She hasn't gotten the empathy thing down yet. So developmentally, she's still back between three and six, even though she's eight – almost nine. So something has happened there to delay development, because that's really not normal for a kid her age – to tantrum for an hour. So I think all that points to attachment issues while she was younger. I don't believe that she was beaten. I don't believe she was abused. I don't even think she was neglected. But I think that the environment there was so chaotic.... And her mother suffered post-partum depression and was having a terrible time in her marriage. So you can just guess that she wasn't emotionally available at that time for her. She doesn't remember her father, so even though it's not like a hurt, it's a gap that hasn't been filled.

What we do to help children develop – because they develop sequentially, from the simplest to the more complex – what we do to help them needs to be developmentally appropriate or it doesn't work. You can't buy a three-year-old a slide rule and expect them to be wildly excited about it. In fact, you couldn't buy *me* one of those and expect me to be...I guess that's developmental delay, isn't it? Or it's just not good at math. So we've known that all along, but now we know more about why that's true.

Let's go to Mark 4, and verse 28, and read one of my favorite scriptures. This is Jesus talking about how things grow. What do you know?! And He says

Mk. 4:28 – *All by itself the soil produces grain – first the stalk, then the head, then the full kernel in the head.* First the brain stem, then the limbic system, and then the cortex. Living things grow in stages.

So neural sequential development is just a fancy way of talking about the way *God* does things – the way He grows us, the way He grows plants, everything. Incidentally, we have an entire series showing what spiritual things a child can learn at each age. Since the brain grows in stages, it makes sense to teach kids what they're ready for when they're ready for it. And when we do that, it goes in easily and naturally, without a lot of

resistance. If we give it too early, they don't get it. If we do it too late, it doesn't stick as well. So that series is called *Spiritual Growth and Human Development*. As far as I know, nobody else is talking about that. So good stuff to listen to.

So it looks like we're going to get two principles per presentation. We did one last time, because we had a big long intro. We did two today. We'll do two next time. And then on the fourth one, we'll probably do the last one and throw some implications, or else carry it out for another twenty sermons. But when you're thinking about all of this stuff, just remember, *it's all about relationships*. If you remember that, then that is going to pave the way for understanding.