



Web-Based Radio Show


Best Understanding of Autistic Spectrum Disorders

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Good morning, I want to welcome everyone to our Web-Based Radio Show. This is Dr. Greenspan and I'm delighted that you can join us for today's show. We have a very, very interesting topic today and it's one that many of you ask me about and I thought I would try to cover it in a very succinct manner. There is much more to say about this topic, but I'm going to try to hit the highlights. The topic is the true current best understanding of what we mean by autistic spectrum disorders, and not just what we mean by the disorders, but what it truly is, what its causes are as best we know, what its prognosis is, what the different treatment options are, and what some of the common myths and mistakes we make about autistic spectrum disorders. I say it's a complex subject because there are many, many historically important but no longer correct assumptions about autistic spectrum disorders.

So let's jump in and try to cover this topic in a very outline-type form, but hitting some of the highlights. Then in subsequent shows, and also in some readings especially my book, *The Child with Special Needs*, more can be amplified on this subject. But let's begin with what are autism and autistic spectrum disorders. Autism and autistic spectrum disorders are complex developmental problems. They involve a number of areas of functioning including relating and forming relationships, communicating and that's with both gestures as well as with words or symbols, and thinking - including high levels of reflective thinking - can be challenges. Even where children are verbal, the ability to reflect on your own thoughts and feelings, to judge your own thoughts and feelings and judge the feelings of others can be very, very hard for children with these kinds of problems. Also, commonly we see motor problems, especially with motor planning and sequencing and sensory processing problems with some children involving problems with visual spatial processing, understanding where things are that they see in space, and also with sensory modulation – the ability to respond to sights and sounds and touch without being over reactive to these sensations or under reactive, where they hardly register.




Now these complex developmental challenges that I just described all also can have different expressions; other different combinations. Not every child has all of them in the same degree even though they may receive the same general diagnostic label. So children, for example, with Asperger's Syndrome, which is part of the autistic spectrum, may have problems in relating and in communicating with gestures and emotions, but often have large vocabularies and may be early readers, but they often are not as well developed in their capacity to use words meaningfully in an emotionally relevant way as they are in their capacity to simply repeat words or understand the dictionary definition of the word.

Another variation is children who have severe motor planning problems. Some children have severe oral-motor problems, which means it is very hard for them to move the muscles in their mouths and move their tongue properly in order to be able to speak. Some of these children who have general motor problems so they are constantly moving and almost distracted by their own motor movements and have severe oral-motor problems may appear to have less cognitive abilities and less thinking capacities and less social skills than they, in fact, have. In a sense they are limited by their motor abilities. When we have been able to help some of these children communicate with other means, it turns out that they are understanding their world to a highly developed degree, much greater than we ever thought that they were before we helped them communicate through different kinds of augmentative modes or different kinds of augmentative help.

In order to understand this complex developmental disorder that we call autism, including autistic spectrum disorders, one way of categorizing some of the phenomenon that go under this disorder, is to think in terms of the core or primary components and some of the secondary components. The primary components or the core components involve the problems in relating, communicating, and thinking. In a nutshell, what we look for in terms of the primary is:

1. Is the child having trouble establishing true intimacy and warmth; seeking out those adults they are really comfortable with like mommy or daddy or a key caregiver or a key helper? Can they evidence some warmth in that relationship with enjoying closeness?
2. Can they communicate with their gestures; with emotional expressions? Can they get into a continuous flow of back-and-forth emotional signaling with smiles and frowns and head nods and showing in a variety of other interactive gestures?
3. When they use words, can they use it meaningfully in emotionally relevant ways? In other words, are the words or symbols invested with emotion or affect so it's,




“Mommy, I love you” or “I want that juice please” rather than “This is a table” or “This is a chair.”

Now if these three components are not present, the capacity for intimacy, the capacity for exchanging and reciprocating different types of emotional gestures in a continuous way, and the capacity for using emerging words or symbols meaningfully with good emotional intent, then we should consider that this child may be evidencing a form of an autistic spectrum disorder because they have these core difficulties. Also, parents and professionals can consider that the degree to which these three core processes for intimacy, for engagement, for back-and-forth emotional signaling, and for using ideas and words meaningfully and creatively like in pretend play, the degree to which these three processes are not functioning in an age-expected manner, the degree to which they are problematic, that may indicate at least initially the degree to which the child is evidencing an autistic spectrum disorder-type problem.


There are, however, also what we call secondary symptoms such as the tendency to perseverate such as lining up cars or toys, the tendency to self-stimulate such as staring at a fan or waving a bright light in front of one’s own eyes or other activities where the child is simply jumping or rubbing a spot on the floor in a repetitive and self-stimulatory way. These types of repetitive or perseverative and/or self-stimulatory activities should be thought of as secondary symptoms, not the primary symptoms. Similarly, repeating words in a scripted way, such as we see when a child just echoes what someone else says in echolalia, for example, or just repeating whole books that are read to a child or just repeating whole TV shows that a child sees, these are secondary and not primary components of this disorder. The reason why I emphasize this point is because these secondary components are seen in a number of other kinds of developmental challenges, not simply autistic spectrum disorders. So they are not specific to autism, and therefore they don’t characterize the disorder and therefore they shouldn’t be used as the primary criteria for making a diagnosis. So for example, children who have sensory processing problems, but who otherwise have excellent language and relationship skills and can read and respond to emotional signaling, so they don’t evidence an autistic spectrum disorder, may be self-stimulatory or perseverative because they may get overloaded because they may be sensory over-reactive to things like touch or sound, and when they get overwhelmed they may line up their toys or they may repeat things they’ve heard, or they may just decide to just shake their bodies in a repetitive back-and-forth way that appears self-stimulatory. They may move in self-stimulatory manners as a way of trying to get back into some sort of self-regulation.

So these secondary phenomenon are not specific to autism. You see them in children with sensory modulation problems such as children who are over-reactive to



sensation. We also see them in children who have severe motor planning problems, who can't sequence their actions to solve problems. They can carry out a problem that has one or two steps to it but not a 10 step action plan to solve a problem. They may also, when they get overwhelmed or stressed, be perseverative or self-stimulatory. Because we see perseveration and self-stimulation in a variety of developmental problems, again we should think of these as secondary phenomenon and not hang our hat on them to make a diagnosis. It is a little bit like the metaphor of the forest and the trees. A child may have a few trees that are not functioning as well as we would hope and that requires some work, but that doesn't mean that the whole forest, therefore, is having a challenge. So the primary or core challenges such as in relating, communicating, and thinking – those are the forest issues. Specific trees that involve perseveration or self-stimulation may or not be part of an autistic spectrum disorder and as indicated they can be part of other types of problems in sensory processing or motor planning, sometimes children with just language problems may evidence some of these, or children with very circumscribed cognitive challenges or learning challenge may also evidence some of these specific trees. So we want to notice the trees and if they are a part of a broader pattern of an autistic spectrum disorder, we want to certainly note that but we don't want to make a diagnosis based on these specific trees. The key is to look at to what degree can the child engage intimately, to what degree can they interact using gestures and emotional signaling, and to what degree can they use ideas creatively with meaning because these ideas are invested with emotion or affect. That is the key to making a proper diagnosis and to knowing what their true challenges are. Every parent should underline this next point. The parent and the individuals who see the child every day for hours a day are the ones in the best position to actually determine the nature of the child's difficulty. The professionals, including myself, can help you with giving you the criteria; with telling you what the patterns mean, but only the person who knows the child very well and sees the child all the time, can determine the degree to which the child can truly be intimate, the degree to which the child can exchange their emotional signals, and the degree to which the child can use their ideas creatively. You have to be with the child all day long and see those moments when the child is doing it one way and then another way. Having simply seen the child for just a few minutes or even an hour is not as useful as knowing that child thoroughly.

This gets to another point of understanding this syndrome. One of the biggest reasons for misdiagnoses, children who can relate, communicate and think being diagnosed with autistic spectrum disorders and there are many misdiagnoses made unfortunately, is not spending enough time with the child and the family and not watching the child interacting with mother or father or other trusted caregivers for long enough periods of time. In many evaluations, children are separated from parents,



evaluated by relative strangers, and challenged to perform unstructured tasks such as various types of developmental tests in a way that doesn't take into account the child's individual differences in the way they process information. So the child is stressed and confused and that tends to bring out the lowest level the child is capable of, not the highest level. To make a proper diagnosis, you have to see the child at his very best. You also want to hear about and see what the lowest part of his capacities might be, but you don't want to base your diagnosis on the child's worst level of functioning but rather on the range of his functioning. This means you have to see the best functioning possible. A child who can walk, can walk. He may not walk with a strong wind, but he can still walk a little bit. This means he can get stronger. Similarly, a child who can engage and exchange emotional signals and use ideas creatively, even if he can't do that all the time and even if he can't do that under stress if he has that ability, that tells us a lot about the child and what we have to work with. So it's critical to know that. The only way to determine that is to spend at least 45 minutes watching caregivers and children interact in spontaneous ways, in addition to whatever tests one determines needs to be done, and always this spontaneous interaction should be first. One needs to also see the child usually on more than one occasion. It's often helpful to see if the observations coincide with what parents report goes on at home, to view video tapes at home or make a home visit or at least compare notes with what goes on at home and at school with what you are seeing in the clinical, office, or evaluation setting. So that's critical to determining these primary and secondary processes.


In a review we did of 200 cases, most of whom were initially diagnosed at major medical centers, we found that over 90% of the centers, and these were highly qualified centers, did not observe the child or infant interacting with caregivers for more than ten minutes. And from my perspective, you just cannot make a proper diagnosis with less than ten minutes of watching spontaneous interaction between parents and caregivers.

The next point I want to make is that what we think of as autistic spectrum disorders should be viewed as a dynamic, not a static process. What do I mean by that? When we think of a static process, we think of something that is very, very fixed. In other words, the child will be this way no matter what the environment, what the context, or what the circumstances. A child who has blue eyes is unlikely to change his blue eyes from one circumstance to another circumstance. It's unlikely to change between today and six months from now. We may perceive his blue eyes differently, depending on the lighting, but his blue eyes are likely to remain relatively stable, although sometimes over years we may see changes in some of the texture of the colors. That's a relatively fixed trait. On the other hand, dynamic traits have to do with many of our feelings or emotions. They are changeable from one day to another and certainly changeable over months or

years of time. The core processes that we have been identifying for autistic spectrum disorders, the ability to relate with intimacy, the ability to exchange emotional gestures and signals, and the ability to use ideas meaningfully and with emotion, these are dynamic processes. These are not fixed. These are not stable over long periods of times. These can and do change. Now they change more for some children than others, and as we'll talk about shortly, they'll change more with certain kinds of treatment programs than other kinds of treatment programs. But it's important to see autistic spectrum disorders as operating as a dynamic process which means these core components that we're talking about are open to change over time and are influenced by the treatment programs. Now there are different opinions among professionals as to the degree to which these processes can be favorably influenced. There is certainly a difference in opinion about the degree to which they can be favorably influenced in one versus another child; what the potential of the child is. My own view is that the processes are highly dynamic, which is changeable, and that the prognosis can only be determined by one factor, which is the child's actual growth. In other words, what goes on at home, the treatment programs and many other factors - the child's own internal maturation of his or her nervous system, will influence the child's growth and these dynamic processes. But the only good predictor, the only good prognostic indicator, is to watch the child's pattern of growth over a period of time and look at that learning curve. The steeper the slope, the better. The bad news is that often we see no progress at all. Usually that is because we aren't having quite the optimal program of intervention at home and at school and in various professional contexts. Usually we can improve that learning curve by optimizing the intervention program. The key is to tailor the intervention program to the child and then watch the child's progress over a few year period of time, in a truly optimal program. That's the point that needs to be underlined. Then the prognosis can be indicated by the slope of that learning curve. Remember the slope may change from year to year depending on the program and depending on how that child's nervous system is developing, and depending on how the child's mind is developing. So don't feel that a growth curve that is sloping only a little bit needs to stay that way. Our goal is to help that learning curve be as steep as possible but steady. The key thing is continuing progress. So the prognosis is determined by the child's own learning curve over time, not by static factors that exist at point A or point B. To be sure, there are certain factors that tend to suggest a more rapid learning curve and other presenting features that tend to suggest a slower learning curve. I found that over the years these are not as reliable as the child's learning curve itself. So rather than trying to predict, the idea is to create the optimal program and watch the child learn and follow and enjoy his or her progress.

Now as part of considering autistic spectrum disorders as a dynamic and not a static process, it is important to get rid of some myths. One myth that has been


circulating very recently is based on research, but it is a misinterpretation of the research. There is some recent research showing, for example, or suggesting that when children with autistic spectrum disorders including Asperger's Disorder see the human face and see human emotions on the face, they process that in a different part of the brain than when an individual without an autistic spectrum disorder sees pictures of faces or sees human emotions on faces. This research would seem to be strong evidence that the brains of children with autistic spectrum disorders are different and maybe they just can't process emotions and the human affects and the human facial expressions quite in the same way that others can. But a colleague who is very innovative, Professor Morton Gernsbacher at the University of Wisconsin in Madison, and her colleagues, they did a very important study. They replicated a study that suggested that when children with autistic spectrum disorders looked at the human face they processed emotions differently by doing two things. One, they noticed that in the original study, the children may not have been looking at the face and maybe the reason why they weren't processing the emotions of the face that they were seeing in the areas of the brain that normally process emotion was because they weren't looking at the face. They may have been looking at the shirt of the person or something else the person had on then that was an object. In fact, one of the studies showed that the children were processing emotions in areas of the brain having to physical objects, not with humans. So in their study, Gernsbacher and colleagues encouraged the individuals to actually look at the face by creating incentives to look at the face, and what do you know? Their finding was that then the children with autistic spectrum disorders processed the emotions in the exact same areas of the brain that children without autistic spectrum disorders did. Actually, I think this study was done with adults – adults with autistic spectrum disorders. So that the problem wasn't different ways of processing emotions in the brain, at least not according to this study, but the problem was in whether the children were looking at the human face or not. One of the clinical insights we had and many other groups have had and that Gernsbacher and colleagues have had is that children or adults don't look at the human face as readily sometimes because there may be too much information and it may be too overloading. Just like a shy person when you meet them at a cocktail party and they look kind of down at your ankles and look away until they warm up, similarly children who are sensory over-reactive or adults who are sensory over-reactive may need a little warm-up period. They may not look at the face very readily. This doesn't mean that they can't look at the face and this doesn't mean that they process emotions from the face differently, it just means that they find it a little stressful to look at the face too quickly. In fact, when Gernsbacher and colleagues measured the emotional reactivity of these individuals and the stress responses, they found that when they did encourage them to look at the face, they were getting physiological measurements suggesting some degree of stress response; some degree of anxiety or tension. This confirmed the hypothesis that the reason for not



looking at the face was due to anxiety or stress, being sensory over-loaded by looking at the emotions in the human face. So what they found was that the individuals were processing emotion in the same way that everyone else was, but that they had a preference for not looking at the face because it was overloading and somewhat stressful. They could look at the face with some encouragement. What is interesting here is that we see the same pattern with individuals without autistic spectrum disorders – individuals who are shy or cautious who are also sensory over-reactive. So this shows us, this particular study, how we can create a myth very quickly from one or two studies, or even three or four studies by not looking at the studies carefully enough. Frequently we over-generalize for a particular research study and try to make clinical determinations.

Now another myth about autistic spectrum disorders is that individuals with autistic spectrum disorders may not love at the same degree of empathy and warmth and intimacy that others can. We have found this not to be the case. One of the first abilities that we find that gets cooking, so to speak, when we institute a comprehensive affect emotional relationship-based approach to intervention, is that the children become comfortable with closeness and warm and intimacy. Many of the children become extra dependent on their caregivers and some of the parents tell us, “He (or she) wants to be with me too much now. I want some independence.” Well, I say, “That’s great news!” Because for a child that we were worried was in his own world, nothing is better than to have the child want to be with you too much. Gradually we can help that child now learn to be independent because now they are part of a relationship. Also, because that function comes back quicker even than language or other functions, that suggests to me that that is a very flexible system and not a fixed and moveable part of this disorder.


Also, there is a lot of research suggesting that children with autistic spectrum disorders cannot empathize with others; do not have theory of mind capacities. But we found, again when working with a relationship-based affect approach, that as language improves and as cognitive abilities improve, theory of mind and empathy improves proportional to the child’s language and cognitive skills. The children who have done very well in our program are very capable of high levels of theory of mind and high levels of empathy. In fact, we have a subgroup of children who are diagnosed with autistic spectrum disorders who I would say, and the parents describe them – as do their teachers – as having probably a little better empathy than their age peers who never had developmental challenges in the first place. Now we have some research showing that and we’re doing a follow-up with these children now, as late teenagers, and we’ll have a report on this follow-up very shortly. But I can tell you that preliminary look is that their progress has continued and they are highly warm, empathetic, caring individuals with



friends and they are also doing well academically. This is only for a subgroup, but it is a significant subgroup. It shows what is possible with the proper program.

Now another issue that gets raised frequently, is the issue of causes. Is autism a fixed biological disorder based on a single genetic pattern? What has been emerging in recent years and months from our own research and I think a reasonable interpretation of the research going on all around the world now is to consider what I call a multi-causal, multi-path model. In this model we consider not one cause but multi causes working together in a kind of cumulative risk model. There are clearly genetic components and genetic susceptibility, but also this genetic susceptibility may make certain children vulnerable to certain other events such as environmental toxins. We know that there are many things such as lead or PCB's or dioxins that affect the central nervous system. We suspect that it affects the central nervous system more in certain children than others depending on genetic susceptibility. So likely what we have is a multi-cause cumulative risk model where depending on genetic risks and early insults to the nervous system, some which may occur pre-natally, certain later challenges may be more or less destabilizing and lead to developmental problems. So this is a hard model to research because you may not be able to find one particular factor that say at age 18 months or two when we see a lot of children regress, that accounts for the regression in all children. But we may find other patterns of genetic susceptibility and different patterns of cumulative risk in different children.


We look at the other part of this model is a multi-path model. We believe that there are multiple paths to this disorder. Some children, as we mentioned in other places, are sensory over-reactive. Others are sensory under-reactive – just the opposite. These are very different biological pathways and so they are different kinds of paths. Children have different types of levels of relatedness and affect signaling capacities and cognitive capacities. So there are likely a number of different paths, each with different cumulative risk factors associated with them. In fact what we may find when it's all said and done, is that there is a variety of biological patterns operating here with a variety of genetic patterns that create certain types of susceptibility. It has become popular in recent months and years to talk about a range of phenotypes implying or suggesting that there is one type of genetic pattern and a range of phenotype expressions. But, in fact, we may have both a range of genetic patterns and a range of different types of behavioral expressions. So we have to think of this as a complex set of developmental processes, possibly influenced by cumulative risks and possibly coming about through multiple pathways. If we look at it that way, we are more likely to get answers to our questions about causes. I think this is a better way of looking at it than to try to look for an overly simplified model.



Now there appear to be some common pathways, though, just like information is a common pathway for many different biological processes and fever is a common pathway for many different biological processes. There may also here be some common processes and that's why children share some of the symptoms. But it doesn't mean that there aren't multiple causes, cumulative risks, and multiple paths. So I urge our colleagues and parents to think in terms of this kind of complex model.

Now in terms of treatment options, this is where it really gets important. We have a big choice here to make. One treatment option basically works on the assumption that we can favorably influence the foundations for relating, thinking, and communicating. In other words, if we can favorably influence the core foundations that help a child learn to be part of a relationship, to help a child learn to signal with their emotions and help a child learn to communicate with words and help a child ultimately learn to think and reflect. We call that model that wants to build the healthy foundations for relating, thinking, and communicating, even for children with severe problems with these capacities, the DIR or Floortime Model. The DIR means the Developmental Individual Difference Relationship-based approach. It takes into account the way the child functions at their different developmental levels, the way the child processes that information through all their sensory pathways, and the way the child uses relationships that are tailored to their individual differences to build the foundations for healthy relating, communicating, and thinking. We talked about our DIR Floortime Model in other shows, and you can read about that in *The Child with Special Needs*.

Now the other major model of intervention is one that focuses more on the surface symptoms and the surface behaviors, trying to change those; trying to get rid of the child's tendency to be repetitive or the child's tendency to self-stimulate. It doesn't focus as much on the underlying foundations. It doesn't focus on the individual processing capacities of the child. This historical model, for many years was the best we could do and it was the only model that we had. But now as we have insights into the way in which the nervous system grows and develops and the way in which children develop their core capacities to relate, communicate, and think, we can begin moving more towards building healthy foundations and we can incorporate principles of the behavioral models into that. For example, when a child learns to relate, they are no longer self-absorbed. When they learn to communicate meaningfully, they no longer tend to perseverate or just script their words and phrases. So every time you build a healthy foundation, we also remove certain symptoms. But for children who need some more structured work, we can incorporate behavioral approaches into a foundation-building approach.



Also, there are many different relationship-based approaches now. Colleagues are coming up with very innovative ways of building that interactive relationships and teaching relationship skills to children on the autistic spectrum. We can incorporate these into our broader DIR Model. The way of doing this is to always tailor the interaction to the child's nervous system, always try to build spontaneous interactions, and harness the child's natural interests and emotions as part of these interactions. If you do that and you try to get a continuous back-and-forth flow of communication going as you are working, you can incorporate many semi-structured and even structured activities into an overall DIR Floortime approach. We have a paper on this that is up on our website that you can access for more information about this.

So in conclusion, this has been a quick run-through of autistic spectrum disorders. It's a complex disorder, but it is a dynamic process and we can now, more than ever before, work in better and better ways of building healthy foundations for relating, thinking, and communicating, and can do this with children with a range of autistic spectrum type challenges. The key is to work with each child according to their individual profile – of the way they relate, communicate, and think - and find a way of reaching their unique profile and them, in the context of their family with a very, very systematic program that involves family, school, and professional interventions as part of the comprehensive program. With this we are seeing that the prognoses that we thought were possible in the past are changing. In the past their estimates, for example, 80% of children with autistic spectrum disorders may still show the symptoms of autistic spectrum disorders many years later. But this was not based on children in an optimal treatment program. So the true prognosis for autistic spectrum disorders, in my view, has yet to be determined, and we need new research. Our preliminary studies suggest that it is far better than we thought, but there is a huge range with some children with much better prognosis than other children, but each child's prognosis can only be determined by that child's learning curve. So we have to be modest in the face of what we know and what we don't know and realize that true prognosis will need to await further research with better and improved intervention strategies because the old data doesn't hold given modern intervention approaches. We also need to work with each child as an individual and see what that child is capable of.

Now what I want to do is turn to our caller. We have a caller waiting and I apologize for keeping you waiting a little longer than usual but we had a lot of material to cover today. So let's take our first caller.

Caller: Hello?

SG: Hi, Dr. Greenspan here.

Caller: Hello Dr. Greenspan, how are you?

SG: Fine, how are you?

Caller: Fine. I have a similar question. It is not about any child in particular. As you mentioned, there are a number of children who respond extremely well to DIR type of intervention and develop higher capacities of thinking such as being able to show emotions and behaviors and so on. But I have also heard, and this is my question, I don't know if it is true or not, that some of these children that do extremely well and they have higher capacities of thinking than children who develop typically, they still have trouble with friendships and they exhibit some behaviors that are considered weird by their peers and they still struggle to become part of the group.

SG: That is a very good question and thank you for asking it. One of the things we recommend and it is a very important recommendation and it's one of the hardest ones for families to actually carry out and many parents I think will resonate with this. We always recommend that the children start having four or more play dates a week at a very, very early age. So as soon as we help the child become engaged and related and a little bit verbal, and as soon as we help the child be able to exchange back-and-forth emotional signaling, we want the child to practice that with peers as well as adults. So I urge parents always to do four or more play dates a week in addition to school. Many of the children are in a regular preschool with an aide or just in a regular preschool on their own, or in an integrated program so they are having access to other children in school, but I want the one-on-one play dates after school because there is a greater degree of intimacy and greater degree of back-and-forth emotional signaling. Most parents, even those that I see in my own office, have a hard time finding the four play dates a week because the child is busy, it requires a lot of telephone calling, etc., etc. Some do one play date, some do two. Some get up to three. Occasionally we get families who do the four or more play dates a week. What I have seen is when we can get the four or more play dates a week starting when the child is very young, the ability to relate to peers which includes reading the subtle emotional signals of peers and that's hard to do on the playground because this back-and-forth signaling is happening very, very quickly, and to be "with it" and in the "group" you have to be able to read the emotional signals, and the families who do more of the play dates tended to do a little better as a group. Now there are always individual differences and some children have a hard time with their motor planning and sequencing so it's hard for them to interact in a large group or they get so sensory overloaded it's very hard for them to interact in a group. But by in large, the more practice we give to the peers early when they are still young, the better the peer relationships. And it's never too late for even 7, 8, 9, or 10 year olds or teenagers, again to spend more time with peers. Sometimes you can even find special group activities


where the child will make new friendships, like a drama group or a sculpting group or an art group, or a computer group, etc. so the child has a chance to meet children who share similar interests and can develop friendships with those children. So that is the key. Now the reason why some children move ahead on their thinking skills before the peer relating skills is simply because we give them much more practice on easy thinking tasks. Actually thinking with adults or thinking in school and not enough practice thinking with their peers. Now what is interesting to me, also, is peers will accept a range of differences. All the children differ in terms of athletic skills or dance skills or dress, and some children are more physically awkward than other children just because of poor motor skills. Children, I find, accept all those differences pretty well in each other and don't think of the other child as weird or unusual if the emotional signaling is ok. In other words, it's when the other child doesn't read the emotional signals and they can't get into that back-and-forth rhythm of emotional signaling, they feel something is not going right in the interaction, and that's when it scares the other child and then they label the child as unusual or different because they don't know how to deal with that child. So we have to help the children with the emotional signaling. Often we over focus on how the child is performing a particular sport or whether the child has this or that overt feature. But I find the key is the child's emotional signaling. We have had children who are loved by their peers and get along very well and have severe language problems, but have very good affect signaling capacities. So other children help him out and kind of take care of him a little bit, but they enjoy being friends with him. So we have to work on that emotional signaling. That's the key to the peer relationships. It is not easy to do and that's why I want to start it early. So the children with special needs do have a harder time with peers, so the key is to give it extra practice, not less practice. Ok, thank you for that excellent question.

Caller: Thank you very much.

SG: Ok, bye bye. I think we have another question? Not yet? Ok. We lost our first call because I went on too long, so I'm going to read one of the questions that you were kind enough to send to me by email that we are not going to have the person on the air, but let me read this question and answer it, then I think we'll have another caller calling in a few minutes. *I'm working with a 28 month old child with autistic spectrum disorder. His family and his early intervention team are really getting a handle on helping the child self-regulate. I want to introduce increased opportunities to facilitate motor planning strategies into his present Floortime sessions. This is the difficulty we are facing: This child can be fully engaged in sensory motor play, vocalizing, and closing numerous circles of communication, but will only attempt a motor planning activity once before totally disengaging himself and walking away. He likes novelty and*

high contrast environments. We try to keep the motor planning activities simple and basic. Help! What are we doing wrong?

This is the key. Many children, and this is typical for all children, not just children with special needs, will want to avoid tasks or challenges that are hard for them. In a sense, children naturally do those things that are easy because the easy things are fun. So for example in school, when a child wants to read it's usually because that child finds reading easy. My wife is a good example. When she reads a good novel, it's like watching a movie. The words lift up off the page effortlessly and she's into another world and a great story and she can lie back and read for hours. For me, in contrast, reading is hard work. I have never been able to read for pleasure, I only read for information and for content and I'm tired after a half hour of reading because when I learned to read, it wasn't easy for me to learn to read, and it never became an effortless activity, so I don't like it. I would avoid it if I could and only the motivation of being an adult has helped me focus and actually read. But it is similar with motor planning activities. If a child has a hard time sequencing their actions, they want to avoid them. That's hard work. A child who is a great natural dancer or athlete who can sequence actions easily, wants to do sports or dancing all day long because it is effortless and it makes them feel good. We all know the pleasure we get from an activity that is intrinsically pleasurable to us. Those are the things that we do well. We always want to improve our abilities in those areas. So here is the key. The key is starting with simple things that the child can master. If the child can do a two-step motor planning activity, start with a two-step. Make the activity highly pleasurable so if it is an obstacle course with a treasure hunt where you find something through the obstacle course, he does two steps and he gets something pleasurable and make it something that is also socially pleasurable for him so it's part of a relationship so you are involved in it. It may be that he goes through two steps and then he gets into some rhythmic activity where you are playing airplane with him and picking him up and moving him around and you are both giggling together. Then you make it a 3-step activity, then a 4-step activity, then a 5-step activity. The harder it is for the child to stay engaged and the more avoidant he is, the better the pleasurable affect has to be. So the more fun you have to make the task, and the more gradually you have to increase the complexity. So you always want to have the child hit about a 70-80% success rate so that they are not finding it too hard. The key thing is the gradualness of the increasing complexity and the intensity of the pleasurable affect that you associate with the successful mastery. So if he likes novelty and high contrast environments, sometimes what you do is you use that novelty as part of your pleasure in the activity. Some of the kids will do much better, for example, at large motor activities that require multi-step actions than they will with fine motor activities. So you play to the strengths initially until you get longer and longer sequencing and then you



move into the weaker areas of motor planning and sequencing like from the gross motor into the fine motor or vice versa, from the fine into the gross. So that's the key: gradualness. Also, the other key is using the other senses to support the motor planning. If the child has got good visual spatial abilities, for example, and is a child who can search easily, use a lot of visual cues. If the child is somewhat verbal, use a lot of verbal support. So use the stronger sensory processing capacities, positive pleasurable affect, continuous affect of interaction, and make the challenges small in the sense of two then three then four, and a lot of positive affect. There is no substitute, also, for a continuous flow of back-and-forth interaction as you are doing this, so as soon as you lose a child and he walks away, step in front of him and keep the interaction going so he never has the sense of disengaging, even though he is changing activities. So I hope that is helpful for that person who wrote in that excellent question.

I'm going to read one more question, but also for the caller we lost, please call back in. This is the caller with the 3 year old about to start preschool. If I don't hear from you in just a few minutes, I'll read your question out loud. But let me take one more question that we have that is an excellent question that was written in during the week.

My ten year old son has started acting up at school for the past two days. He struck his one-on-one aide and also kicked his teacher. He again threatened to kick, hit, and bite today. He has been diagnosed with an autistic spectrum disorder, he is very verbal and he has made progress over the last few years. While he has had temper tantrums in the past, he hasn't displayed such aggressive behavior.

Now when you see aggressive behavior like this, you always have to look for causes. Usually there is a stress such as a change. The child may be experiencing a loss, there may be at school more challenges than he is used to at the end of the year, there may be a teacher who is overloaded or shorter with the child, there may be people at home who are leaving or a therapist that you are changing. The key is, if there are changes occurring in the child's life that are accounting for this, or there may be new toxic substances in his environment. Do a profile of all changes and try to help the child who is verbal, verbalize the feelings about those changes; to talk about them. Also create more regulation, more basic Floortime at home and more regulating experiences for the child. Provide more of the basics – more empathy, more warmth, more basic relating, more back-and-forth emotional signaling, more pretend play where they can play out their feelings, more discussion of their feelings, and also have them think about tomorrow – about this person who is going away, or about the move this summer, or about the fact that daddy has been working hard lately, etc. So verbalize it, but do it against the background of more calm regulation and more anticipation, and sometimes in the settings

where the child being more aggressive, there has to be a little more structure and a little more guidance offered so the child isn't getting overloaded. Ok? Now the person who had this question, thank you for an excellent question.

Now let's take our next call. Hello?

Caller: Hello.

SG: Hi, Dr. Greenspan speaking.

Caller: Hi Dr. Greenspan. This is Debbie. I sent you the question about the 3 year old who is starting preschool.

SG: Yes, great. You were our first caller and I'm sorry that we delayed and didn't get you on right away. Let me hear your question.

Caller: Ok. My son just turned three and we are getting him into preschool. We have at the public school, we have an autistic program which is verbal behavior and a special ed class. Neither one of those are inclusive. I know how big a proponent you are for inclusion. My other option in order to have inclusion is to put him into a preschool out in the community; a mainstream preschool where he would be the only child with developmental issues. I could go with him or we could hire an aide. So I wanted to know from you if you think that is a good plan and who ideally you think should accompany him, and how I should handle that situation in a Floortime context to his advantage. Should I try to get him to join in planned activities? What kind of system should I ask the teacher for? Should I make an announcement to the other children, something to the effect of we need to help Jason to learn to talk? Just generally how that situation would work.

SG: Well, in general you asked some great questions. As you know I can't talk about Jason per se, but I can talk in general principles about children like Jason. Then you and your helpers – where are you from?

Caller: New Jersey.

SG: Yes, so you and your helpers in New Jersey can maybe then determine how to apply this to Jason. But in general, particularly for a three year old, it's very helpful to have a child in a setting where the other children are very interactive and communicative. That's why we like either integrated settings or regular school with a helper or an aide, or it could be a parent or it could be someone else. So I tend, in general, to favor that particularly for a child who is interactive and beginning to become verbal and can interact off their emotions. So if they have made that progress already, we want to harness that.

If we put the child in a setting where the other children have relationship, interactive, and communication problems, as child A is beginning to communicate more spontaneously, the other children can't always respond as quickly as we need them to, and it's not their fault. That's why I prefer for all children with special needs to be in more integrated settings or more in regular educational settings with an aide or a helper. They all need children who are going to react and respond to them. The only time that is not the case is when the child is just beginning to learn to relate and gesture – there most of the work will have to be done with adults anyhow, so then it can be done either in an integrated setting or in a special needs setting. Once they can exchange signals, we have to have that setting. Also, it is very important to have lots of peer play dates at home, one-on-one, to facilitate that interaction with peers.

Now in terms of how to do it, whether the parent comes in or someone you hire or a friend with the child, the goal of that adult is to facilitate interaction with the other children. The goal of the teacher is to facilitate interaction with the other children. So we don't just want parallel play, and we want little games and you can be as structured as you need to be in the school setting to create those games where the child will interact. Any sort of exchanging of emotional signals or gestures or any sort of interaction is good. Again, the only negative is allowing just parallel play and self absorption. Whether it is mommy or someone else, I would say it should be determined very practically. If mommy being there offers some comfort, and the child will play with other children, then that's terrific. If on the other hand if mommy being in there seems to not be associated with facilitating play with other children and an aide could do it better, because of the child's familiarity with mommy maybe the child just wants to sit in mommy's lap, but with someone else in there maybe they will be a bit bolder and play with the other children, then be practical. Whatever works. Whatever promotes. You can get a feel for that by trying it both ways. Mommy can go in sometimes and see how it goes, and you can have a friend go in with him once or twice and see how that goes and you can be looking through the peephole in the door and see what you think. Then you can decide practically which is going to work better for little Johnny or Suzie. There is no particular benefit for a three year old to saying we want him to be independent and therefore we want him to not have to have mommy there. So that is irrelevant to a child where we are working on intimacy and relating to begin with, because we don't care if he is dependent on mommy. That's wonderful at this particular point.

Caller: I just wanted to say, would you say something to the other children in order to help them to relate to him?

SG: Here's the rule of thumb, again not about your little guy but it sounds like he's doing wonderfully, but about children in general. Only tell the other children what


they can already observe. In other words, don't overload them with more information than they need to have. So if there is a situation where a child is in a wheelchair, then they are already going to see that. So it's nice if the teacher or the parent says, "You know, little Suzie needs to have a wheelchair because she is having a hard time walking and we're going to need you guys helping us sometimes to wheel her from one place to another and to make it easier for her to get around." But they already know that. So a little child who isn't talking if he wasn't verbal at all, you can say, "little Suzie or little Johnny is just learning to talk and you all can help him by talking a lot to him." So just kind of what they will observe on their own and in a way that will facilitate interacting with the child who needs a little extra help and the teacher or the parent can be the one to do that depending on who the teacher feels would be the best to do it. The teacher may already do that for a variety of things and sometimes a good way for this to happen is not as a separate event like, "Today we are just going to talk about little Johnny coming into the class" but talk about maybe a number of children who have special characteristics that everyone can help with. So for little Mabel it might be she needs help with this and little Johnny needs help with that and someone else needs help with this. And that way the class is getting some education, even three year olds can learn that everyone is a little different. So it could be a discussion about how people are different and how we all need to help each other. The examples have to be very concrete for a three year old like how we sometimes need help in cleaning up the toys or we need help standing in line. Like little Mabel likes to wander a lot, so anyone who can show her where the line is when we all have to stand in line, that would be very helpful. Little Johnny has trouble talking, so more talking to Johnny will help. This one could use a little help when it comes to using the crayons, etc. Ok?

Caller: Ok.

SG: Do you have any other questions about this?

Caller: If this is something I was able to get the public schools to pay for, which is something I'm attempting, one of their concerns is how to quantify or measure Floortime results in this kind of setting.

SG: Well I think the way to measure is to tell them that any results, Floortime results or any other program they have for children, is to look at the child's improvements in their ability to relate, communicate, and think. We have a scale called the "Functional Emotional Development Scale" and we have a book called, *The Functional Emotional Development Scale*, that you can get from our website, www.icdl.com. It shows the research on this scale and it's a scale that can be done by a teacher observing the child or by videotaping the child and then scoring the tape. Now also we have a questionnaire



that will be out in a few months called, “The Greenspan Emotional Growth Chart – A Screening Questionnaire for Infants and Young Children.” It has been validated and also on a normal population with also some clinical samples which means that it has been shown to be used reliably and can distinguish children who are having difficulties from children who are not having difficulties. It is a questionnaire that parents fill out or teachers fill out about the child. Harcourt Corporation and the Psychological Corporation, the people who do the Bayley Scales, are the ones who are producing it. I’m working with them and it will be available this fall with a manual. This would be something very easy for them to use because either the school can do the rating or the parent could do the rating, and you can see progress in the child’s ability to learn to focus and attend, to engage in relationships with others, to exchange preverbal signals, to problem solve and sequence, to use ideas creatively and then to use ideas logically. It will assess all six levels and these are the areas we want to see progress in. So they can either use the Functional Emotional Assessment Scale book or get a hold of our new Emotional Growth Chart that will be available in September from Harcourt Corporation. Those are the things you need to monitor, whether it’s a child is getting Floortime or the child is receiving another program. You should instruct your school system that often the school tries to measure things like how many words the child is saying or whether the child is holding the pencil properly or putting blocks in a block sorter, and those are not as important. Those are also good skills, but are nearly as important as the child’s ability to relate, communicate, and think. So the areas that I’m suggesting are far more central to the child’s progress than anything else, and those are the things that this approach that you want to do with your youngster influences most favorably because we are working on those skills through the DIR Floortime Model. But they ought to be assessing these capacities with any approach they have. So tell them you’d welcome them doing that, but also you’d like them to do it more broadly, to help other children as well.


Caller: Ok.

SG: Great. Thank you for your great question, and good luck to you.

Caller: Thank you so much.

SG: Great, bye bye.

Ok, well that is our show for today. Thank you all for joining us. Next week we are going to start a series of shows looking at how different vital capacities become developed in our children. These will apply to children with special needs as well as children without special needs. We are going to look at capacities such as the ability to relate and engage with others, the ability for empathy, the ability for assertive leadership, and so forth. Next week we will begin with a very important capacity of empathy and we



will look at the developmental growth chart, so to speak, for empathy – how it develops in babies, toddlers, preschoolers, and school age children, and even adolescents, and how it leads to an adult’s sense of empathy and how do we help children with special needs as well as children without special needs develop their capacity for empathy. Each week, over the next number of weeks, we will take a different trait or a different characteristic and discuss how it develops and what we can do as parents and professionals to foster that capacity along. So we look forward to seeing you next week when we talk about empathy. Thank you for joining us.