

## **Web-Based Radio Show**

### **Making a Proper Diagnosis and Identifying Early Learning Challenges**

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Good morning. Welcome to our Web-Based Radio Show. We have a very interesting show for today. As you know, we like to stay with the current interests that come in through emails and through your questions. Today we are going to focus on two very important questions that came up and have actually been coming up in a lot of the emails and requests for more specific information. The first topic for today is going to focus on how we make a proper diagnosis, particularly when there are many competing possible diagnoses possible. This is important because the diagnosis can lead to the proper intervention plan. In itself, the diagnosis may not be critical, unless there is something that can be rapidly reversed by having the diagnosis. But, it is very, very important for intervention planning, to understand exactly the nature of the problem. A misdiagnosis can lead to a mistake in the intervention plan, which can, unfortunately, lead a child on a developmental pathway that may not be in that child's best interest.

The second part of today, we are going to focus on how to identify early challenges in learning, and how to use our DIR Model for doing that. So, whether a child has special needs or doesn't have special needs, we want to be able to identify emerging learning challenges before the child arrives at school, so we can begin preventive patterns and preventive activities while the brain is growing most rapidly.

So let's jump into our first topic, and that is the question of how we select the proper diagnosis for a child. Let's begin with a case example. A little boy that we will call "Charlie" presented as a 3 ½ year old little boy, and his parents told me that he had already been diagnosed with a number of different labels, and they were completely confused. One of his presenting problems was that he wasn't playing with peers at his preschool, and tended to either play alone or avoid the other children. During one evaluation, he was therefore labeled "social anxiety disorder."

This little boy also had some other challenges, such as difficulty with his language. He could speak, but wasn't always able to understand complex instructions that would be appropriate for a 3 to 3 ½ year old, like a two- or three-step suggestion, or if you asked him why he wanted to go outside, he would often look confused. Sometimes




he could answer a question, such as where the car was going, if he was playing, and other times he would ignore the question and just push his car forward. So he had also been diagnosed with a language disorder.

Occasionally, his parents reported, he would also jump around the room in a seemingly aimless way, particularly if he got excited, and would flap his hands a bit and walk on his toes. At other times, he could seem to get mesmerized by a fan or by looking toward a light, but his parents could usually draw him away from that by touching him or getting in front of him. But, they were concerned about these patterns. In one evaluation, the diagnostician put together the social problems with peers, the language challenges, and the tendency to become a little bit aimless or jump up-and-down and flap, what the diagnostician called “self-stimulatory behavior,” and made a diagnosis of an autistic spectrum disorder, and also used the term, “PDDNOS” (Pervasive Developmental Disorder, Not Otherwise Specified). That is usually a diagnostic label reserved for a child who has features of autism, but may not meet the criteria for an autistic disorder, but may meet the criteria for being on the spectrum, so sometimes the term PDDNOS is used.

During one other evaluation with an occupational therapist, the parents also reported that this little guy was very reactive to certain types of sensations. In loud, noisy rooms, for example, with a lot of music or with children speaking loudly, he would cover his ears and seemed to get over stimulated. He also, however, had trouble making certain sounds, and sometimes chewing and even swallowing very chewy kinds of foods. The occupational therapist felt that he had a “sensory integration” problem, as well as low muscle tone in parts of his body, and also oral-motor difficulties in terms of not being able to make all the sounds expected for a 3 ½ year old, or to be able to chew and use his muscles of his mouth as fully as a 3 ½ year old would be expected.

Confronted with all these different diagnoses, it is very understandable that Charlie’s parents were feeling confused, and even more confusing to them was the fact that they were getting different intervention recommendations based on each of the different diagnoses. The clinician who diagnosed a pervasive developmental disorder and autistic spectrum disorder recommended a special needs school with an autism program. That frightened the parents, because they felt he would be with children who would be functioning in a way that wouldn’t invite him, or challenge him to be more social, or to use his language as fully as perhaps he could. At the same time, the speech therapist recommended intensive speech therapy to help him reach age-expected language levels, and the occupational therapist recommended occupational therapy to work on his muscle tone and his sensory modulation challenges. The clinician who diagnosed social anxiety disorder recommended a consideration of medication, even




though he was only 3 1/2, to reduce the anxiety. The parents were frightened because the recommended medication was for a SSRI-type medication in the categories of Paxil, Prozac, etc., and they had read in the newspapers recently that that might be associated with negative side effects.

Therefore, as I stated earlier, it's not surprising that they were not only confused in terms of the diagnosis, but they were more concerned about, as they put it, "What should we do? How should we help our little guy?"

It was clear from this preliminary background that we needed to do a fresh and complete evaluation to get a picture of what was going on with Charlie, and what would be a proper diagnosis and what would be a proper intervention plan. We began by helping the parents talk more about their current concerns, and where they thought Charlie had some strengths and some vulnerabilities. The areas of vulnerability or challenge, they went over, corresponded to what was just mentioned a moment ago. They felt, however, that there were some strengths that, while he was anxious at school and avoidant of the other children and wasn't playing with other children, with them at home he could be very warm and intimate, crawl up into their laps and want to cuddle, loved sitting late at night with Daddy and look at pictures in a book, and also had a very close relationship with his Mommy. They would do things like roll trucks on the floor during the daytime, and also he liked to come into the kitchen when she was cooking and he would sometimes get out a little toy pot and pretend to stir and cook with her. They felt that he was a very, very loving little fellow. Related to that, they had a question, since he was their first child, whether they should have another one, which they wanted to do, or if they needed to wait, given the fact that there were some concerns and did they need to focus more attention on him. They thought, though, that he would be able to enjoy a sibling because he enjoyed them so much.

Also, they pointed out that at times he could be very creative in his pretend play. When Mom would play with trucks with him, for example, sometimes the trucks would go and visit Daddy's office. If she asked him why the truck was going there, he couldn't answer often, and might just change the subject and have the truck bang into Daddy's office and knock it down as though he got a little anxious with a question he couldn't answer and got a little aggressive, she felt he had these little creative flairs where he would invent something new in the play. She also felt his strength was that he could tell her when he wanted something, like if he wanted some juice, or wanted to watch a favorite TV tape, he could ask, "Mommy can I watch the Barney tape?" or "Can I watch this or that?" If she said "No," he would sometimes get upset, but she also thought it was a strength that he wouldn't throw a 4+ tantrum, but might stomp around a little bit or whimper, and then recover after a few minutes.




From his developmental history, parents reported that he progressed as expected and was looking at them as a little baby, was able to smile by three or four months and seemed happy, he was able to be purposeful in terms of reaching and interacting with them and making sounds and babbling back-and-forth with them before the end of the first year. He was a little delayed on his rolling over, crawling, and walking. He didn't walk until about 15 months. They were concerned about that. Even now, they reported, he was not as well coordinated as the other children, and this fit in with what the occupational therapist had said to them about some low muscle tone and some difficulty with motor planning and sequencing, as well as being sensory over-reactive. They also noted that it became very clear in the second year of life that he was very, very sensory reactive to things like loud noises and certain kinds of touch – he only liked soft, cotton garments and didn't like rough or even synthetic garments. He got fussy when things were near his skin that were uncomfortable.

Also, they reported that he began using words a little bit late, around closer to age two, in terms of using two words together. He had some single words around 18 months, but he wasn't progressing like the other children in terms of understanding “why” questions or even complex “where” questions, but seemed to be moving forward in that development.

There were no unusual medical disorders, he had shown some eczema as a baby and they had eliminated milk products and had still kept milk and dairy products away because of the tendency toward eczema and that had been the pediatrician's recommendation, which seemed to be helpful.

When we saw Charlie, we observed him very carefully, playing with Mommy and Daddy, both spontaneously and then with my giving the family some suggestions to bring out his highest level of functioning. What we observed was, in the play in a one-on-one situation which was calm and without noise and without a lot of other children around, he was able to focus and attend and interact with his Mom and Dad, rolling cars or trucks back-and-forth. He was able to show a lot of joy and happiness, smiled warmly at them during the play, and made a lot of gleeful sounds when Daddy, for example, blocked his truck at one point and he had to make his truck into a “flying truck.” He was able to be purposeful, doing a lot of back-and-forth, two-way communication with vocalizations, back-and-forth, and gesturing. He was able to, at one point, take his parents by the hand to go to the door because he wanted to go out into the waiting room to get a toy that he had seen out there before, and so he could get into what we called, “Shared Social Problem Solving” where he took them with gestures, and then said, “Open the door.” He couldn't explain why he wanted the door opened, but he was able to say, eventually with some multiple choice help when the parents gave him choices, whether he wanted to go




get a toy or was he hungry or did he want to go to the bathroom. He said, “Toy, toy there.” We got a toy from the other room and he came back in as a happy camper.

Sometimes he seemed to get distracted and he’d be playing on one theme and then he’d jump to another theme, and then another, and wasn’t always able to follow through as much as his parents indicated they would have liked him to. I observed that to be the case in the play. One time, Daddy was setting up a challenge that he had to climb over something, which was difficult for him, as part of the pretend play they were involved in, and rather than follow through, he just went to the other side of the room and started playing by himself with another toy. I encouraged Daddy to go over and join him with that other toy, and then to move the toy behind the barrier that he wanted him to climb over, and then to offer to help him. With that assistance, actually, he allowed Daddy to help him and climbed using Daddy’s hands as a helper and climbed over the little barrier we had set up in the office, and got to the other side to get his favorite toy. So, he could meet that challenge with a little bit of support and help, but tended to get avoidant and change subjects rather quickly when the shared social problem solving did get a little bit challenging.

He could be creative in his use of ideas. He had the trucks visiting different houses, he could put people inside the trucks, and he could talk using his available language, using simple phrases and sentences and respond to his Daddy saying, “What’s this?” or “Where is the car going? Going to the school or going to the garage?” At one point the car needed to go “Get gas.” Also, he could use language meaningfully in requesting to go out and get the toy in the other room. Another time he was hungry and requested some juice, “Can I have juice now?” When it came to connecting his ideas together, he could answer most of the “W” questions – “what,” most of the time “where” questions, but not all the time, “who” questions, but had trouble with “why” questions, but with multiple choice help he could get them. So if you gave him choices like “Do you want to get the toy or do you want to go out there to go to sleep?” he would say, “Toy, toy!” So he got the hang of the “why” question, but didn’t quite have it fully mastered.

So, he showed lots of good capacities when we observed him in pretend play, interacting with parents. Also, we observed some of his sensory, motor, and visual spatial processing capacities, and we observed that when it came to, as I mentioned before, hard motor tasks, he tended to avoid and give up easily. He had little trouble with sequencing and with adding many steps in a row together to solve a problem, like getting over a barrier or a hurdle. At one point, we took out some drawing paper and some crayons, and he had difficulty holding the crayons – he tended to “fist” them. He could scribble, but not really make circles or make shapes or copy shapes his parents were doing. But, he



seemed to enjoy just scribbling with a fistful crayon. He seemed to enjoy making colors. There, too, he showed difficulty with following a number of sequences, in terms of following some directions.


Also, we played some “Simon Says” games with just seeing whether he could follow two or three things in a row. He could do one thing like, “touch your nose” or “touch your head” but had a hard time doing two or three commands in a row if we didn’t do each command separately.

We did a little search game around the room – a little treasure hunt game to see if he was a systematic searcher, and whether he could take into account the whole room and figure out a systematic search strategy, and there we had trouble. He looked in two places and then kind of gave up and got distracted, rather than search in all four corners of the room, indicating some challenges in the visual-spatial area.

Also, I should add that at one point during the play, I suggested that when they were playing with cars and trucks, that Daddy should be allowed to “toot” his truck because I was curious to see how he dealt with loud noises because that had been indicated from history as a problem, and to be sure Daddy’s toot’s became loud, he held his ears and got a little antsy and began jumping around and walking on his toes and shaking his hands a little bit when he got overloaded with Daddy making these loud toot-toot noises. This indicated that when he got sensory overloaded, he wasn’t able to coordinate his body in a rhythmic or organized way, and needed to do the jumping and hand shaking as a way of dealing with the sensory overload.

When we put together the history, the review of his current functioning, the challenges, and the observations just made in the clinical setting, we were able to come to a picture as to what was the proper diagnosis for this child, and what would be an appropriate intervention plan. Now as you recall in the original description, I mentioned that there were a number of diagnoses given – from social anxiety disorder to PDDNOS to an autistic spectrum disorder to language disorders to sensory integration disorder or problems. The key in making a proper diagnosis is not to give a separate label to each component part, but to see how all these different components fit into one pattern.

Now, first we wanted to rule out some of these diagnoses that were given. First, the most severe one and the one that worried the parents the most, was the autistic spectrum diagnosis and the pervasive developmental disorder. Was this the kind of problem that was pervasive and that would require an autism program? Here, while this little fellow, when he got overloaded, showed some tendency to hand flap and to jump up-and-down, and was avoiding other children at school, he did appear to have a very nice capacity for warm intimacy and he was able to signal with his emotions and get into




reciprocal back-and-forth emotional signaling. And, he was able to use his emerging ideas very creatively. In other words, off of his affect or his emotions – the ideas were driven by his wishes, needs, desires, or feelings. He wasn't scripting his ideas or using just memory.

So when you look at whether or not a child has an autistic spectrum disorder, it's important to separate the forest from the trees. There are many specific symptoms, such as hand flapping and jumping, that children with autistic spectrum disorders share with children who get sensory overloaded, have immature motor systems, or may have other processing problems, but really are not on the autistic spectrum. This little guy seemed to fit into that group where he had some of the trees, but didn't have the forest that would characterize an autistic spectrum disorder because he was warm and engaged, he could gesture with his emotions and affects and get into reciprocal back-and-forth emotional signaling, get involved in shared social problem solving, and use his ideas creatively. He was making progress in becoming a logical thinker. The fact that he was avoiding other children seemed more related to the sensory overload, the immaturity in his motor system, the low muscle tone, not feeling confident in his body, and the anxiety and confusion that he felt that a more primary problem with wanting to relate to others.

So based on that, we felt he did not really evidence an autistic spectrum disorder or pervasive developmental disorder. Then the question was, since he was anxious at school, and I could see him get anxious whenever the task was hard, even during the play session like climbing over the barrier, the question was what would be the best way to characterize the anxiety? Would this fit into what we call an interactive disorder?

In this case, when I watched the parents play with him, I was looking for whether they were intrusive, or over stimulating, or having trouble being soothing and calming. I should also add that I also explored the family patterns and family relationships. I found that there was a solid relationship between Mom and Dad, there was no marital stress or problems, there were not yet any siblings, although they were hoping to have more children, and they seemed to relate to little Charlie at each of his developmental levels. They were calm and regulating, they were engaging, they were interactive, and they were also quite creative in the way they wanted to play with him. So I didn't see any real interactive reasons in terms of the family dynamics for Charley's anxiety. So I didn't feel that we had, what we call, one of our interactive disorders, in the way we categorize disorders, anxiety disorder comes under interactive disorders. So I didn't see an interactive anxiety-based problem, although I did see anxiety.

Then we looked to what we call another category of disorders, "Regulatory Sensory Processing Disorders." He did evidence clear sensory over-reactivity to sound,




and by history, to touch, and he did show some low muscle tone in parts of his body. I could hear his difficulty articulating certain sounds, for example, m's and l's were hard for him, although I could understand his words and so could his parents. The combination of the low muscle tone, coordination challenges, motor planning challenges, and his sensory over-responsivity was consistent with what we call a Regulatory Sensory Processing Challenge or Disorder.

Now in our framework, we have a number of different types. Those associated with sensory modulation problems, where the child is either hyper-responsive to sensation, such as being anxious and fearful because a cat's meow sounds like a lion's roar and therefore it's understandable why the world seems scary and they would be anxious on that basis. Or, some children are hypo-responsive, where they don't register sound or touch that easily and may be insensitive to pain, for example. Other children with sensory modulation challenges may be sensory seeking – very active and dare-devilish. He seemed to clearly fit into the hyper-responsive category, where he was more fearful and anxious and at school he was avoidant of the other children.

Also, another category in our regulatory sensory processing disorders, are children who have motor planning and sequencing problems, or dyspraxia. Some of them also have what we call sensory discrimination problems, where it is hard for them to distinguish different types of sensory input, like different types of touch or different types of sound or different types of sights. Some have postural control problems because of their muscle tone and it makes it hard for them to coordinate or hold their body in positions that make it easy for them to enjoy activities.

He seemed to evidence, also, some motor planning and sequencing challenges, or dyspraxia, and some muscle tone difficulties, and some of that was making postural control or balance and coordination a little bit harder for him, as well as making fine motor development harder for him, such as holding the crayon properly. So, his pattern seemed very consistent with what we call a regulatory sensory processing problem or disorder.

We also looked at his language functioning very carefully. In fact, typically between age 3-3 ½, children are learning to answer “why” questions and he was just beginning to do that. So he seemed a little late on some of his receptive language capacities, and he was having trouble with some of the articulation capacities. He did have some language challenges, though not very severe. They seemed to be at the stage of using symbolic thinking, and at the stage of being involved in shared meanings. So, he was in an advanced stage of language development in terms of looking at it in terms of infancy on up through early childhood, but there was a little bit of a lag in terms of what




we wanted to see, both in terms of his articulation and in terms of his ability to comprehend abstract concepts like “why” questions, but moving in a positive direction. He seemed like a potentially bright little guy who would keep progressing in his language.

Our diagnostic impression, therefore, was of a regulatory sensory processing challenge, with a mild language challenge, with the social anxiety and some of the immature motor movements secondary to these core problems. To complete our evaluation we also wanted to do more than have simply a primary diagnosis. We use what we call a multi-axial approach, which simply means that we want to observe and describe the child in many areas of functioning, in addition to the primary diagnosis based on the evaluation I just described. So, we also look, for example, at his functional emotional developmental capacities. For those familiar with our approach to functional emotional developmental capacities, we look at shared attention, engagement, two-way purposeful communication, shared social problem solving, the creative use of ideas, and the logical use of ideas. He evidenced mastery at all of these levels, but a little sluggishness at the sixth level of combining ideas together or logical thinking. In other words, he wasn’t quite able to answer “why” questions yet, but seemed to be moving in the right direction. So, there is a constriction at the sixth level of functional emotional developmental capacities, but with forward progress, and this seemed to be related, in part, to his language challenges.

Next thing we look for are the child’s capacities in terms of regulatory and sensory processing, which we have already described for this little guy. He did have the sensory over-reactivity, some low muscle tone with some oral-motor challenges, and some coordination and postural control challenges. So we had a good picture of his regulatory sensory processing challenges.

We also looked systematically, at the child’s language challenges, which I also already described for this child, that there were some articulation challenges, and a little sluggishness in terms of his receptive or comprehension skills, in terms of abstract concepts like “why” concepts, but he was moving in the right direction.


We also look at the child’s visual spatial processing, and as you recall I mentioned in the play with him, he wasn’t able to systematically search around the entire room, and also had trouble copying some of his shapes. That was due, in part, to the motor problems, but he also didn’t seem to have a very good concept of the way visual designs worked and the way a whole room was laid out and all the possible places the toy could be hidden. So, there seemed to be some visual spatial processing challenges that were also contributing to his difficulties.



We also always look at interactive caregiver/child patterns, or caregiver/child interactions, and family functioning. Here we saw some relative strengths. This family seemed to be supporting this child's development, and in fact it was my impression that he was doing as well as he was doing, in spite of some of these uneven patterns in the way his central nervous system was maturing, in terms of some of these regulatory sensory processing and language challenges that he was having, in part because of the strength of the way his caregivers were interacting with him, playing with him, and the warmth one could feel in the whole family. So, I thought there was relatively strong family patterns that were helping this child negotiate and navigate development and make consistent progress, even though there were some constitutional maturational variations resulting in the regulatory and language challenges.

We also always look at stressors. In this family, there were no unusual stress, there were no recent illnesses, grandparents passing away, moves from one house to another, job changes for Mom or Dad – the only stress for this little guy was trying to cope with preschool and the noise and activity level in the classroom. Then we also look for other medical or neurological diagnoses that may contribute to the child's challenges. Here, other than a history of some allergies and eczema, this little guy had been pretty healthy. There was no history of seizures or metabolic disorders. They had regular pediatric evaluations and there were not physical contributions to the challenges that he was having that could be identified, other than the ones we had mentioned in terms of uneven maturation of the central nervous system.


So when we looked at this little guy in terms of a complete evaluation, we have a profile of his functioning, his strengths, as well as the areas of challenge as we just mentioned above. We had a warm, related, interactive, creative, bright little boy who was sensory over-reactive, who had little areas of low muscle tone and some coordination problems, and some mild language challenges. He was secondarily anxious at school because of these challenges, and the goal was to help him become more comfortable in peer play and also progress in his language skills and overcome his regulatory sensory processing challenges. Therefore, we recommended and planned an intervention program that would deal with each of these areas in a supportive and comprehensive manner. We began with the home program, recommending parents do Floortime with him everyday. Because he was functioning well, we recommended each parent do at least two 20-minute sessions with him, otherwise just enjoy interaction, but minimize screen time to a half hour or 45 minutes a day. In the Floortime play, where they get down on the floor and play as they were in my office, the goal was to make the dramas complex and throw in the “why” questions whenever possible and help him with multiple choice help. That way, we would help him get more practice in receiving complex



information and thinking. Also, we would throw in complex directions once in a while, so he would have to sequence more actions in a row and do that as part of the pretend play to help him also practice his language skills.

We also recommended some oral motor work where he would work on some of the sounds that were hard for him by doing it as part of fun Simon Says and imitative games, using a big mirror, and he could see Mommy and Daddy making the sounds in front of the mirror and see how their tongues work and his tongue worked, and we were guided also by a speech pathologist who I recommended that they see who would guide the oral motor program and also help him with mastering some of the receptive language skills where he was lagging a little bit behind. We also recommended an occupational therapy evaluation and program to work on the sensory modulation challenges and the motor planning and sequencing challenges and some of the muscle tone challenges. In addition, we integrated that into the home program, so at least twice a day for 20 minutes each, there would be a physical workout involving some running, jumping, spinning, some perceptual motor games like throwing, catching, kicking big Nerf balls, some balance and coordination games, walking over balance beams, etc. as well as some search games – treasure hunts where he would learn to more systematically use his visual abilities to search around the room. He had one occupational therapy session a week, and had a twice a day active enjoyable program, and we incorporated that into the Floortime so that the physical workouts were part of pretending, but we had them as two additional kind of workouts.

Most important for this guy, we also wanted to get him more comfortable with peers, given his sensory over-reactivity, and to help him tolerate wider ranges of sounds. In part, the occupational therapist was working on that with him, but we also involved a number of activities that would help with that too. The first was to work up to four peer play dates a week. The parents had been avoiding that because “he wasn’t enjoying his peers.” So, they weren’t having him play with peers as much. But, the principle is that if you are finding it hard to do something as a little guy, we need to give you more practice, not less practice in doing that activity. So, we gradually worked up to four peer play dates a week. The goal of Mommy or Daddy or a teenage helper who might be babysitting in the afternoon, was to simply create games where he and his peer friend would be interacting together. If they were drifting apart, they were playing nicely doing some pretend play, or just running after each other, or being silly together, that was fine – we wouldn’t interfere. But if they were moving in their own directions, beating to their own drum, or getting into parallel play, we’d create a little game where they had to hide together and we had to find them, so there would be some communication and interaction between the two of them. Or, an art project where they would make something together –




the idea was to get them used to interacting with peers. We initially selected peers that weren't too noisy or rambunctious and wouldn't frighten or overwhelm him.

Also, we recommended at school, that they have a little corner where they had a tent and they had some natural separators that they could use, so he could have his own little fort or own little tent area, which would be a little bit away from the other kids, and he wouldn't be getting banged into and wouldn't be quite caught in the middle of the room and get overwhelmed, both visually and in terms of sound and in terms of touch. He could play with one other child. We originally encouraged one of the aides at school to try to get him and another little friend some one-on-one time. There was a little boy who was sweet and also quiet, who seemed to like him and he liked the other little guy, and we got them off into the corner to the tent area, and with the help of the school aide, they've started interacting and playing with one another. Then we added a third child in there, and pretty soon we had him playing with two other children in the preschool setting. But, we had to do it very gradually so he wouldn't feel overloaded. Also, we worked with him to say, "Too loud, too loud" when it was getting too noisy so he could run up to the teacher and go, "Too loud" and she could see if he needed a little break and one of the aides could take him for a little walk outside or take him to a place where he doesn't get so overloaded and it's not so noisy.

We also shortened his school day a little bit. They had him going from 9:00-12:00, and it was from between 11:00 and 12:00 that he seemed to get the most overloaded and started jumping around and started hand flapping, so we shortened it from 9:00-11:00. That seemed to work a little better for him. We thought we could gradually expand it once he got a little more used to a wide range of sounds.

Also at home, too, we worked with him on using his gestures and using his words to indicate when something was uncomfortable – when the noise level got loud. So rather than just jumping and flapping and getting uncomfortable, he could jump over to us, meaning Mommy and Daddy, and say, "Too loud" and use his words as well as holding his ears. We also developed some games that he could play with music, making it louder and softer. We also had Daddy do a lot of, what we call, "modulation games," where we do things soft, loud, medium loud, and even louder with drums and with other instruments, so he could be in control of his sound world and gradually learn to adapt to a wider range without getting so anxious about it, or so scared by it.


These strategies together resulted in gradual progress. This little fellow has done very well! Interestingly, his language skills are now age-appropriate a year and a half later, he's a bright little guy, he's enjoying friendships, he still doesn't like big, noisy environments and finds the school yard, outdoors, which is a big space and lots of kids



difficult, but he enjoys one-on-one play and he enjoys small groups. He is very creative in his play, his motor skills are developing so he is learning how to hold crayons and enjoying drawing and enjoy making things. He is basically making very, very good progress. He is a child who we decided have him start kindergarten a year later than his typical age would be, to let his motor system and his sensory modulation and his language skills to catch up a little bit, and he seems to fit very well in with that type of a program. It looks like he'll make very nice progress in a regular kindergarten class. We are going to have him be in a small kindergarten class where again, the noise and activity level is not too great. His visual spatial skills are getting better and better as parents, as parents during part of their play, did lots of treasure hunt games and lots of games involving throwing, catching, tracking, and using both his motor system in space, and also understanding how space works in a larger environment, also, by working with his body in space, through obstacle courses, and through other kinds of games that we did as part of the OT-guided home-based play program.

In summary, then, this is an example of a little boy who presented with a range of diagnoses, from social anxiety disorder, to pervasive developmental disorder, an autistic spectrum disorder, to a language disorder, to sensory integration disorder, and we had to figure out what was the primary diagnosis, and what were the additional secondary diagnosis? For him, the primary diagnosis was a regulatory sensory processing problem with the anxiety being secondary, and the secondary diagnosis of a language challenge. In our multi-axial framework, we also saw some visual spatial challenges as well, and some mild challenges in his functional emotional developmental capacities. We also identified the family strengths and the fact that there were no stressors and the fact that there were no contributing medical neurological disorders, and that enabled us to construct a comprehensive program, within which he has made very nice progress and done very, very well.


Therefore, what I wanted to leave us with today, in terms of this case, is the importance of a comprehensive approach to both the evaluation and the diagnostic process. The way of thinking diagnostically, and always trying to identify, particularly for infants and young children, where a child is in terms of three possible broad categories of disorders. First is the interactive disorders, where anxiety or depression or compulsive behavior or other problems may be a result of interactive patterns between the child and the caregiver. These interactive patterns don't indicate that the family is at fault or the child is at fault, but just something in the interaction. It could be a combination of the child's maturational variations and temperament, coupled with the caregiving patterns or the family patterns which may be fine for an older sibling, but not so fine for this child, are creating fear or anxiety or sadness. There, often advice can be



very, very helpful, as well as guidance. We need to know if it is an interactive disorders. Or, are there constitutional maturational factors? The key factors, as they were in this child, where the unevenness in terms of sensory modulation and motor planning and sequencing, are they the key factors? Or, alternatively, do we have a neuro-developmental disorder of relating and communicating, including an autistic spectrum disorder where we really have a more pervasive set of developmental problems? As we indicated in this case, we didn't feel that was the case because he had so many strengths, even though he was doing some hand flapping and some jumping and was cautious with peers. We also look, though, as indicated in this case, for language disorders and language functioning. We saw some mild lags in this child. In addition, we look at our other areas of functioning, even though we don't qualify them as disorders, such as visual spatial functioning. We look at stressors and overall family patterns. That gave us a nice, complete profile of this youngster, one which enabled us, as indicated, to plan a comprehensive intervention program that met his needs and resulted in nice, consistent progress.

If we hadn't been able to make the proper diagnosis, for example, and if this child had been put into a school program where peers were not able to offer him social and interactive opportunities, his progress may not have been as good as it was. Also, if we had focused only on his anxiety and tried to treat it with medication, or just with play therapy to deal with his fears, and not dealt with the underlying constitutional maturational variations that were contributing to the regulatory sensory processing dysfunctions this child evidenced, we might not have made the kind of progress we made in terms of offering the practical advice we were able to give parents in terms of helping him learn to manage his sensory environment and improve his motor planning and sequencing capacities. Also, it was important for this child to recognize the mild language and visual spatial challenges because we could build exercises into the home program, as well as the consultation of the speech pathologist to work on the oral motor part of his program so that he could become more comfortable with using all the sounds at his disposal, and eventually also learn to comprehend "why" level questions and more abstract dialog. Recognizing that slight lag in his functional emotional developmental capacities helped us make the play not just enjoyable, but also challenging in a way that would help him move ahead in his development.

So in this particular case, and in almost all cases, the proper diagnosis, if done as part of a multi-axial or multi-dimensional approach, where we look at all areas of functioning, and we have a profile of the child's functioning, enables us to construct the intervention program that will be the most helpful.



So I hope this was an instructive, enjoyable case. As usual, I always think we are going to accomplish more than I do in these shows, so I wanted to get to an approach to learning disorders also, but we'll do that in another show. For next week, we are also going to focus on your questions, which have been coming in rapidly, and pick other topics that have very great current relevance. So if there are no pressing questions, next time we'll come back to our theme that I have been wanting to get to for awhile, which is, "What are some of the common principles that constitute households that do very well? What are the rules for sort of healthy social and emotional living or rules to live by?" If we get some more great questions like we got this week, we'll address them and then eventually get to our broad themes.

I look forward to speaking with you next week at the same time, and thank you for joining us.