

Web-Based Radio Show

Regulatory Sensory Processing Disorders Part II

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Good morning. Thank you for joining us. Today we are going to continue the discussion we started last week on the different kinds of regulatory sensory processing disorders and how to approach them from a social and emotional or psychological perspective and now we will also set the stage for going into greater depth about how to approach them directly in terms of strengths of sensory processing and motor planning capacities as well.

As you recall, last week we talked about how as the child develops their capacities to think at the different levels of thinking, what we often call our functional emotional developmental capacities, each new level of mastery makes it easier for the child to cope with, and eventually regulate, their own bodies more effectively. This is the balance we want – we want to improve sensory motor functioning directly and we want to improve the child’s capacity to eventually get to the point, for example, where they can reflect and say to themselves, “Gee, I’m feeling a little overwhelmed and anxious – it’s noisy and I’m sensitive to noise – I better move to a quieter corner of the room.”

Today we are going to go through each of these stages and show how each stage contributes to a greater and greater capacity to reach that reflective ability that I just illustrated.


Also last time, as you recall, I talked about the essential role of emotion or affect as being the critical ingredient that helps the child bring all of their senses together to work as a harmonious orchestra, so to speak, and also integrates it with their motor system which is exemplified as the one month old baby who turns to look at mommy to find her wonderful, beautiful voice saying, “Oh, my darling little sweetheart.” In that very ability, the baby is coordinating vision, hearing, and action – turning their head and looking and searching – with and guided by the enormous pleasurable affect in mommy’s wonderful voice. So it



starts off with first just learning to pay attention to the external world and coordinate the senses with the motor capacity under the guidance of pleasurable affects. The caregiver needs to find those comforting, pleasurable affects. For example, for the auditory sensitive child, the caregiver will need to use a more soothing voice. For the under reactive child who doesn't register sounds or sights easily, it will require more animation and more energy from the caregiver in terms of the parent voice, also a soothing, kind of high energy kind of compelling quality. As the child or child who is more visually oriented obviously more visual animation or greater emphasis on that as well as sound and the child is more sound oriented you still want to use all of the senses, but emphasize the one that helps the child regulate or get interested in that outside world.

At the second stage where the child is becoming pleurably engaged with the human world, preferring mommy or daddy or other caregivers over the inanimate world or to all other sensations, it is very important to have lots of time with the 2-4 month old now who is giving you that big beautiful smile so that they can really organize around that pleasurable affect in that relationship with the primary caregiver who becomes the vehicle for them feeling regulated. So now the caregiver is not only helping the child attend to sights, sounds, smells, tastes, and movement patterns all together bringing all the senses together, but helping the newborn baby feel comforted by the rocking patterns, by the types of touch – gentle, firm, tickly, or more of a squeeze – the quality and tone of the voice. So the caregiver has now found, hopefully, the right formula for comforting and soothing their little guy or gal. Maybe if it is a very colicky baby, maybe due to some GI distress or some sensory regulatory challenges, sometimes it is a little more challenging and sometimes professional guidance may be indicated to find that right formula. It may require lots of movement where you walk with the baby on your shoulder or hold the baby in your lap and apply firm, gentle pressure to the baby's back as you move their feet back-and-forth and hold the baby tightly. There are various strategies that can be worked out, but the baby comes to recognize the caregiver as the source of comfort and focuses on that anticipatory affect even more and more, often searching them out in a room or getting bright eyed and bushy tailed, so to speak, as they enter the room because they are not only a source of nutrition and fun and play but a source of comforting as well.


By 8 months, because this occurs between 4-8 months, we are getting nice back-and-forth interactions whereas we mentioned last time the baby can now interact with caregivers using sound and hearing the sounds coming back from the caregiver, which they could do earlier too, but now we have a real back-



and-forth communicative pattern where the baby is reaching, vocalizing, smiling, and showing a range of affects and the parents are responding back and we get what we call circles of communication. It is just really back-and-forth interaction using lots of gestures, especially emotional gestures with different facial gestures. Now through the baby's facial expressions, arm movements, leg movements, and body posture, and different sounds that conveys emotion, he or she is letting you know what they like and what they don't like. They are learning to regulate their own environment – they are basically telling you to “shush” or to up it a little bit, I'm getting sleepy here, and that is wonderful. So we are getting more and more back-and-forth communication with the baby beginning to get the sense of “I can make an impact on the world” and the baby can now influence and create for themselves through their influence on the caregiver what makes for a more regulating, comforting, and soothing world regardless of the regulatory sensory processing profile.


Once the child begins interacting more and more, for example between 10-12 months and 18 months, we see a continuous flow of back-and-forth emotional signaling with different expressions and more complex gesturing and what we call shared social problem solving. So the child is taking mommy by the hand to walk her into the toy area and points to the toy that they want, with tone of voice and facial gestures and hand gestures urges mommy to pick her up to grab the toy, mommy does it, she gives mommy a big smile, takes the toy and begins playing and invites mommy with a big smile and maybe some waving hands to play with her.

Now in a similar fashion the child is using shared social problem solving to create a more regulating environment for her. If she is feeling overloaded, she can now gesture to mommy to tone it down a bit. She might take her hands and hold them to her ears, or even better, put them on mommy's ears, or even better, put her hand on mommy's lips as though to say “shush.” Not all toddlers can do this. Some will just get overloaded and cry but even just an anguished look or a look of looking anxious is a signal to mom or dad or other caregivers to tone it down for the sensory over reactive child. For the child who is craving lots of sensation, who is active and moving around, the child may grab dad by the hand or the other caregiver by the hand for racing together or go to the box that plays music to get the music on so they can dance, or take out the ball and try to initiate a roly poly game with daddy. This is a child who is very, very interactive, signaling they want action.



The child who is not regulated and doesn't have that social partner and that social problem solving and doesn't have a lot of practice at it might just start running around the room knocking into things and be given an early label of hyperactivity. The difference is that it is socially meaningful and the child is now able to signal what they need. For example, if in the example of the active child, if he is sensory seeking, if daddy creates a little game with the ball and even better if he plays what I call "regulating games" where they go from fast to slow to super slow in how they march around the room or loud to soft on the way they bang on a drum or imitating sounds, go from loud to soft to super soft, the child is learning first of all how to give voice to their need for activity and action, but also learning to regulate; to modulate down. He is no longer the 0-60 child, but can be the 0-20, then 30, then 40, then back down to 20, 10, 5mph again. We teach the child who is sensory craving and active to be a calm and regulated child who can enjoy lots of activities, but now socially meaningful ones in an interactive framework, in other words, interacting with another child or parent. The under reactive child may begin self absorbing a little bit and the parent gets that as a signal to energize up. The child might invite the parent in more easily and be more responsive once they have reached this shared social problem solving. Such is the child who begins pressing the buttons on the pop-up but then looks at a parent very gently and then sheepishly and very slowly like "do you want to do it too?" So the parent picks up on that signal and they are into a little game of pressing the buttons.


Not only at this stage is the parent counter balancing the child's emotional signaling which comes through with gestures with voice, arms, and legs and movement patterns and facial expressions, but the parent and child are also strengthening the affect connection that connects and unites and allows all the senses to punch in harmoniously as one orchestra. It also enables the motor system to work harmoniously with all of the senses so it is helping create connections between all of the different areas of the mind and we can assume or hypothesize the different areas of the brain as well. A good example of this is when you are using the child's emotions to strengthen different processing capacities. So for example, for the child who doesn't enjoy searching as much but is more vocal and maybe repeating some words already – it is easier to ignore their lack of visual spatial problem solving; using vision to solve problems, searching for a new toy or searching for an object mom or dad might hide. So here we might play a game where we take some toy or some food or something the child really loves, so we have our 17 or 18 month old toddler who really loves a particular pop-up toy or a particular truck or a particular dolly. We take that



dolly and we put it in a special place in the room but we put a little barrier in front of it. Then we say, “Where is it?” and we make a game out of it with an expression on our face. We offer our hand to help the child and the child proudly marches over to the barrier and knocks it down to get the toy. Then we take it and make it a little more complex and we have three barriers set up around the room where the child has to search behind all three to find out where their special truck or special dolly is hidden or their special little food treat is hidden. We set up obstacle courses that they have to figure out and negotiate.

Now the child is using their affect; their desire for that special treat with your help as you are offering your hand in assistance in interaction to strengthen their visual spatial processing. The child who would only look in one spot now can look in three or four spots around the room and has a sense of the whole room. He’s beginning to become a “forest thinker” where he can see the whole forest rather than getting focused on one of the trees. Many verbal children with excellent memories tend to get over focused on just one or two trees and we lose sight of the fact that we want to help them become a big picture thinker – a forest thinker as well – which comes through with the visual spatial processing capacities a great deal. So we can strengthen those at his early stage too through our obstacle courses and through our search games and any activity where they have to coordinate vision and action or motor patterns together.


Now once the child has mastered this stage, and the caregiver has become a good counter balancer so the child is now able to create communication patterns, preverbally I might add, where they are more in control of their world, they feel more secure. They feel they can be calm and collected, regardless of their regulatory sensory processing patterns. Now the child enters the next stage where they begin using ideas more. They can begin using their words and they can do pretend play. So we can have a little dolly that is scared because there are loud noises like thunder. We can have a child who says to mommy, “Love you mommy” but we can also have a child who says, “Shush!” or “Mommy too loud” or “Mommy loud.” We can have a child who shows you with the way they stroke the dolly whether they like tickly touch or firm pressure on their body. They can use words to say, “Mommy swing, swing” for the child who is craving movement or wants some vestibular exercise to help them calm down which would be going on the swing. Or the child who needs to be swung by daddy holding her hands, or the child who needs to jump on a mattress or a trampoline a little bit. The child can request it. The child can use gestures, if he is nonverbal but using ideas he can use pictures, and we can create pretend



sequences where the child takes the lead and shows you what the dollies like and through that is showing you what they like. Again, creating more a sense of “I can control my world;” “I can control the way sensations work;” “I can be the master of my environment.”

At the next stage, as the child gets closer to the ages of 3-5, the child is combining ideas together. When you say, “Why do you want to go outside, sweetheart?” the child says, “Because I want to play, mommy.” Or, can explain when you ask how you fee, can explain, “Oh, I feel happy” or “I feel sad.” Now the child who is combining ideas together and thinking logically, in other words understands cause-and-effect that this behavior leads to that result and can express that with ideas, they can say, “Mommy that is too loud!” or “Mommy I don’t like it when the children bang into me” for the child who is over sensitive to touch or sound. Also, the child who needs more may say, “Mommy, I can’t sit. I need to go outside and run” or “Let’s go play on the trampoline” or “Let’s go jump” or “Let’s go play the swing game, daddy” for the child who craves a lot of sensation.


For the child who is under reactive, they may invite you into their pretend play if you have been a good social partner all of this time. They may prefer a quiet game, but if you feel they are talking to themselves, it’s your signal to energize up and make the pretend more creative and joint. Also, this child might find physical activity and other activities that require a lot of motor output not to their delight. You might need to entice them though the characters while playing dress-up where they can be their favorite TV character, but their favorite TV character is going on an adventure with daddy and that will require going on balance beams and standing on Koosh balls and doing all kinds of interesting things. The point is, now the child can actually say to you, particularly in the last example, “Daddy, I’m scared! I don’t know if I can go over the water on the balance beam” which is a make-believe bridge. Well, daddy says, “Oh, I’ll be here to hold your hand, I’ll be here to catch you and I’ll be your super-hero friend.” He then encourages the child to take a chance. So now we can help the child in other ways too. The child who is more verbally oriented but not as visual can create challenges that require, again, more visual spatial understanding of the world. Figuring out how block designs work, how mirror images work, how a long piece of clay is the same as the clay rolled in a round ball by doing experiments together and seeing what the child thinks, and then the parent can create a juxtaposition of the same amount of clay in two shapes and see if the child changes their conclusion, if they thought the long thin one was bigger than



the small round one. Same thing with the tall thin glass or the big fat glass of water.

So we can have all kinds of fun in the visual spatial arena, in the verbal arena, and the child learns to strengthen different sensory processing capacities, and at the same time, learns to regulate their world. The child who is not great with fine motor or gross motor skills can now be enticed into games where they can be creative and do more drawing if they need fine motor work or more of these adventure walks or adventure exploits if they need more visual spatial or more gross motor activity. Fun sports or dance can be utilized, again with lots of explanation and dialogue. The child can tell you when they are frustrated or don't like something and you can empathize. You can also slowly expose the child to more and more sensory experiences that they may not enjoy initially, but with making a fun game out of it with lots of verbal interaction and reassurance that when they get used to it, they are going to find it more fun. The child can express their cautional concern or anxiety or fear or worries, and if you listen and you bring it in to the pretend play and you are empathetic, the child will gradually master and become master of his world and more and more master of his own feelings. The key is not to inhibit the feeling, but express it in a comforting, secure environment with an empathetic caregiver.


Now as we go up the ladder of logical thinking we get into multi causal thinking where the child can give you many reasons why they are feeling overloaded or craving more action, then we get into gray area thinking where the child can tell you just how much touch they want – “Just a little firmer” or “A little harder here, mommy” as you give them a foot massage. Or as you are swinging, “A little more daddy” or “A little less mommy.” So they can really now regulate their sensory and motor worlds and fine tuning it in the gray zone, not with just all-or-nothing – I want to push or I want to swing fast. Now here also, for the sensory craving child, the child is on the move, and you can modulate more – a little bit faster, a little bit faster – but now you can have a verbal dialogue and discussion as to why you are doing it and the child can tell you how they feel while you are having these wonderful adventures and activities with them. “Oh, this feels good” or “This doesn't feel good” or “This feels exciting” or “This feels a little scary” or “I'm not sure I want to do this mommy or daddy.” So now we can have a lot of fun. For the child who doesn't like to do visual spatial processing and doesn't want to do the experiments, they can express their dislike of that, preferring a verbal game. You can challenge them with enticing goals by who is going to win by making the rewards lots of fun for them where they can gain



points to try new activities and expand their worlds so they can strengthen their visual spatial processing or their auditory and language processing as well learn to regulate their bodies in terms of sensations and also planned and execute motor actions more effectively by combining chit chat and what we call high level gray area thinking where they tell you the gradations of what they want to try with the activity itself and where you are empathizing with their feelings. Here, the relationship, the affect, the pleasure, and the sense of mastery are helping them organize their sensory and their motor worlds.

Then we get to the point where they can be reflective. So where gray area thinking comes in between ages 7 and 9, sometimes a little earlier, and multi-causal thinking somewhere between 4 and 6, the next stage from about age 10 and up, we're getting greater and greater reflective thinking where now the child can think for themselves and think about their own thoughts – “Gee, I like this, I don't like that, I can do this, I can't do that” and their self image is now enhanced by their ability to reflect – “Gee, I'm more overwhelmed than I usually am, I wonder if its because this is so noisy or because so many people are banging into me. What can I do to feel better?” The child will have solutions of their own. Parents and children can problem solve together, playing what I call the “Thinking About Tomorrow” game – anticipating situations in advance, anticipating how the child will feel and the child becomes a poet of his or her feelings; anticipating what they routinely do – avoid; and what they can do – slowly try to master the difficult experience.

Try something new where we play the Socratic method and the child comes up with alternatives and we challenge the child to come up with alternatives. As the child gets older, their reflective thinking just becomes stronger and stronger and stronger and they become in charge of their bodies. They can decide whether to do ballet or do sports. Hopefully by this time you have encouraged them to master their world in slow, gradual increments by trying new things or by regulating their sensory craving and activity level through different intensities so they can be both calm and relaxed at the same time they can be intense and fast. If they need lots of adventure and lots of excitement, they can do so in a socially meaningful way like getting involved in sports, dance, and leadership activities. If they like more quiet time by themselves, they can become a great writer or novelist. But they can decide these things on their own. You can support them with the kinds of activities that help them become calm, regulated, and yet expand their systems through music, dance, sports, and other



such activities. So the reflective child becomes your partner in telling you what they need, why they need it, and how it makes them feel.

So this is a quick run-through of the stages we have described in our book, *The First Idea*, and in other places as well, but show you how each level gives the child greater and greater mastery of their bodies and how our friend affect or emotion becomes the guiding light for getting all the senses working together and helping the child eventually become a reflective thinker who can control and regulate their own bodies.

Now of course if the child's emotions are very intense, if they are really overwhelmed very quickly like any adult, they can regress and become a polarized thinker or go back to becoming impulsive, withdrawn, preoccupied, or scared. It happens to the best of us. High intensities of affect or shifts should be something that we are all alerted to. Hopefully the individual will get so reflective that they can notice that and say, "Gee, I'm out of sorts today. What have I been eating? What have I been doing? What is happening in my family that might be making me more nervous, as well as have I been staying up late and exposed to lots of loud noises for three days in a row now so my system is getting overwhelmed."

Always expect regressions with intense changes in that motor or sensory world that we live in as well as the emotional world that we all live in and the relationships that we all live in. As you become more reflective and you get into adolescence and adulthood, you get better and better at diagnosing yourself and finding solutions for yourself.

Well this is a quick run-through of how we work psychologically along side sensory integration trained occupational therapists on strengthening the child's ability to use and cope with the sensory and the motor experiences that they are given and that they develop, and how to strengthen those while we strengthen the child's ability to be the master of his own body and his own environment.

Also it is important to be aware of how to work directly with that sensory and that motor system because there are so many ways to strengthen those systems and help the child regulate them better at the same time.

Thank you for joining us today and next week we will begin a new series on a new topic.