

# **The BEST PRACTICES**

Newsletter  
Of

*The Interdisciplinary Council on  
Developmental & Learning Disorders*

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The Interdisciplinary Council on Developmental and Learning Disorders

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## ***Editor's Note***

Jo Raphael, MSW, LCSW-C  
Molly Romer Witten, Ph. D.

The recent world events have given us all reason to pause and reflect in this very difficult time. The Interdisciplinary Council on Developmental and Learning Disorders is an organization that welcomes people from all over the world who live or work with children with special needs and learning challenges. We are an international group of people working together for a common cause. We are struck by the tremendous losses recently and hope that you are all safe and continue to help our children to learn and grow and to feel safe.

It's been a very busy summer and we are pleased to present you with our third newsletter for the year. We have returned to our regular columns including regional networks, the parent network, clinical insights, medical update, biomedical update and education with some additional contributions by Tal Baz, Sandy Taenzer, and Silvia de Bazan.

The Interdisciplinary Council on Developmental and Learning Disorders continues to grow with your help and support. We are presently preparing for the fifth annual International Conference on Autism and Disorders of Relating and Communicating. This year's focus is "Breaking New Ground in Clinical Care" with wonderful panels and speakers. The panels include: Early Detection and Early Intervention; Advances in Neuroscience and Biomedical Approaches; Assessment and Intervention for Emotional Functioning; New Approaches to Help the Most Challenged Children Learn to Communicate and Talk; and Making Educational Interventions Work. For detailed information please look at our website: [www.icdl.com](http://www.icdl.com).

We look forward to our next newsletter which will feature an interview with a woman who discovered her diagnosis of autism as an adult and explores this journey with her.

Please write to us to post information, to submit an article for consideration or to share your thoughts.

You can reach us by e-mail at (Molly) [besobeso@enteract.com](mailto:besobeso@enteract.com) or (Jo) [jo@icdl.com](mailto:jo@icdl.com).

Best regards,

***Jo and Molly***

## **Education**

Barbara Kalmanson

### Some Thoughts On Peer Supervision In Educational Settings

(Four teachers who wish to remain anonymous)

*Editor's Note: This is an interview with a group of four educators that work together in a school system in a Midwestern State. This group has, over time developed Developmental Individual Relationship based (DIR) resources for their school district. The focus of the interview was an elaboration of their strategies for bringing colleagues into the DIR paradigm using an evolving method of peer supervision for educators. Because they don't want to be singled out, we are respecting their request that they remain anonymous.*

We feel our supervision encompasses the evolution of a teaching model using the DIR paradigm. Our strategies grew out of our own attempts to support each other as educators as we continued to deepen our understanding of the implications for DIR as a teaching perspective. Here are a few underlying assumptions that we can try to embody in our supervision:

1. Our work with teachers is the logical extension of trying to provide differentiated strategies for every child in our program. Since each child needs to be seen as a unique individual, it makes sense to let each teacher lead us and tell us what they do and don't understand about FloorTime and the DIR model. Often educational supervision time is used to tell the teachers or other supervisees what to read, or what activities to provide. However, we use it to listen to the issues that each individual teacher is struggling with around the process of connecting with their students. Out of the collaboration between the teacher and one of us, the strategies more or less take shape. We started supervising teachers and other school based personnel around the DIR paradigm in order to support staff to develop greater

capacity for creating relatedness with the children in their care.

2. Within the context of listening to the teacher's perspective, we are continuously focusing on how to understand the issues regarding children in a developmental perspective. We try to introduce DIR concepts and strategies so that the staff member can adapt the strategies in a user friendly way, at THEIR OWN DEVELOPMENTAL LEVEL. It's easy to forget that each of us has a developmental level ourselves. We use our knowledge then, to help teachers connect with thinking about their students' developmental levels.

3. Very often as we listen, we give a teacher's good practices a name and identity. We want to build upon what people are already doing. Pointing out what the educator is already doing that is essentially DIR based, allows both of us, the supervisor and the teacher to work within our mutual comfort zone, as well as gently expand our mutual comfort zone.

4. Our supervision has led us to some thorny issues. For example, one of the biggest hurdles is 'finding the time' to engage a child in FloorTime. We

encourage teachers to try to relate with the children outside of academic or structured interaction. Therefore, we keep the pressure to 'try it' low by encouraging a teacher to just catch moments when he or she can do FloorTime. As the teacher begins to get the hang of finding moments in which they engage in FloorTime with each child, we actively engage with the teacher to problem solve about when more predictable FloorTime moments can occur. The teacher may need permission to support a child for brief periods away from the classroom groups.

***Actual supervision strategies that we used grew out of our needs and interactions with staff.***

We used the Scholastic Videotape: Floor Time and showed it to Early Childhood Teachers. They were given copies to see the video at home or to see in small groups. We gave background information to each person so that they could have the information that came with the tape. Then we discussed what they had seen and proposed that it be used with typically developing children in their classrooms. When the staff felt comfortable using FloorTime with neuro-typical children, we then encouraged the staff to work with children who just had mild developmental delays. As the staff came to understand just what FloorTime 'felt' like, we encouraged them to try FloorTime with children with more challenging concerns such as behavioral and regulatory issues.

1. Another avenue we tried was to offer a course for credit. We offered a course three times using groups of about 20 staff members. Again, we introduced FloorTime using the video tape as the basis for discussion with both live demonstrations and some home-made videos. In the course we targeted a

range of children initially and worked with families and children individually by asking staff to volunteer to try FloorTime with the child. We have spent several years of evening work with educator-volunteers. Other staff members began to see changes in children even with this limited time commitment.

2. Time was allocated for parent and child education personnel to talk together about DIR based activities. Children did not come to school on Mondays. During this time, staff worked with parents and children individually, using Floor Time strategies. In the early years of our work, educators worked one hour per week. Even with so little time allocated, the staff observed other staff who were doing individual DIR sessions with families, and the positive results that occurred.

3. Many outside speakers were brought in to train staff after a need was developed. At first the staff seemed fine with their limited FloorTime involvement. However, the more the staff used the DIR approach, the more they expressed a need for help with increasingly involved children and children with complex issues. Some of our speakers included: Serena Wieder, Diane Lewis, Barry Prizant, and Stanley Greenspan for a major conference, a few years ago.

4. We began to create a library informally so that we could provide shared books and edited versions of information for families and staff. These materials were distributed widely, not just among parents, but also other teaching staff. Sometimes we would give some materials to a parent who then gave it to a staff member not involved with our work.

5. We didn't worry about having formal classroom space for DIR/Floortime. We implemented this teaching process in a wide variety of educational situations--

small offices, portions of classrooms, hallways, motor areas, etc. As each staff person became more comfortable with the FloorTime process, they individually found ways to incorporate it into their classroom activities.

6. We began a Parent Group for parents of 'multiple system' challenged children. At the same time, teachers provided work with children in an adjoining classroom. Teachers learned and modeled from other teachers the various DIR strategies we found useful in our FloorTime practice. And, the teachers were able to show parents how each child was able to learn best.

7. Several staff members were trained by going to multiple Greenspan-Wieder training conferences in Washington. Staff-in-training then mentored and continue to mentor other individual staff. This mentoring has occurred now for 4 or 5 years of gradually introducing the concept of DIR to other teaching staff and Administrative Staff. Peer Mentoring with classroom clusters every six weeks began last year. Teachers, Speech and Language Pathologists, etc from individual cluster sites come together to discuss children that attend

their site. Peer Supervision with other staff doing DIR/Floortime with staff not attending the more in-depth training in the Washington area was begun on at least a bi-weekly basis. We now provide visitation with a staff member to support their interaction with parents or other adults. Through this one to one consultation, to support the DIR facilitators' interactions, we are finding that teachers easily increase their interactions as well as their empathy and understanding with children with very complex issues of relating and communicating.

We are still evolving how we supervise. In a sense, our supervision starts where the 'new' staff person wants to start. When a staff member asks to "pick your brain" about working with a youngster, it is the opening to begin exploring DIR strategies. As you discuss the issues with the teacher or staff person, using the strategies mentioned above, the teacher or other staff maintains their primary response-ability to reach out to the child they are concerned about. We encourage staff to make a game out of the interactions. We encourage the staff person to give meaning to every interaction with the child. That's how supervision begins.

### ***Regional Networks: Argentina Update***

Jo Raphael, MSW, LCSW-C

Submitted by: Silvia de Bazan

The Argentina Regional Networks are up and running due to the leadership of Drs. Sindelar and Seminar since they first attended the ICDL conference in November 1997. Upon returning home Drs. Seminar and Sindelar began to introduce Drs. Greenspan and Wieder's approach in Argentina. In working with children with special needs Argentina was a country highly influenced by behavioral approaches and a French

psychoanalytic point of view. This made it extremely difficult to bring this new approach and theory to the professionals in Argentina.

Drs. Seminar and Sindelar set up an interdisciplinary team to work with children with special needs. They started the "Centro de Investigaciones en Psicología" where they began to apply the Floor Time approach. They work with children, their families and

schools, tailoring inclusive programs for each child. Operating without financial support from their government or any other organization they provided their services free of charge. They began to use the DIR approach and had significant clinical results. They presented a clinical case at the WAIMH World Congress this year in Montreal Canada (July 2000), which included a videotape with a testimonial from the child's mother and translated into English.

Drs. Seminara and Sindelar organized and gave a training course for 600 teachers of children with special needs in General Roca (State of Río Negro), a city in the southern part of Argentina. This training course focused on the DIR model covering forty hours in three meetings. They presented the theory and practice and then the practical application: they presented a clinical case utilizing the developmental model.

Drs. Seminara and Sindelar translated The Child with Special Needs (Greenspan & Wieder) into Spanish and are currently looking for a publisher.

Beginning in November 1999 they started a Parent Association offering parent to parent support and to join and support ICDL. The group met for a couple of months in order to get to know one another and after summer recess the group began meeting regularly to identify their mission. They have identified the following:

- To promote awareness in the society about early detection.
- To give support among other parents for those parents with a child with special needs.
- To give the parents a place where they can talk with other parents in their same situation.

The group meets once a month. For more information on the parent group, please contact:

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## ***Clinical Insights***

### **A Few Ideas About Abstract Thinking**

Stanley I. Greenspan, M.D.

You teach through opinion, through thinking, not through rote. The key is to talk about things the child cares about with strong affect. Basically, the stronger the affect and the more reflection he has to do, the more abstract he's going to get. Abstract thinking is exercising a muscle just like sit ups and push ups.

The problem with abstract thinking historically has been that we haven't known how to do it. We haven't

known how to isolate the muscle group. The way is to focus on two things. First you focus on affect. When the person *cares* more you're going to get the high levels of abstract thinking. So you take things that they care about. Second, you get the person reflective; get their opinions. For example, Bryan would be very abstract around baseball. You then use the baseball metaphor to understand other things like economic competition. When you do that, you

have good abstract thinking. Bryan would passionately talk about how his favorite team, the Red Sox, was going to beat the Yankees. With that strong interest we were able to help him talk about how much better they were—a little bit, a medium amount or a whole lot. He could also tell us why they were better—they could hit better and catch better. He could tell us how they felt when they won and lost and from that form a bridge to discuss how he felt when he wanted to beat his sister at something.

Therefore, the areas we're most interested in can be applied to other areas as a means for understanding them. What happens with children with special needs is that we don't give them the ability to abstract even one area because we don't discover what they're really interested in and we don't work with them in opinion-oriented and debate-discussions. As a result, they don't have the tools to apply to other areas.

The third thing about abstract thinking is that you're taking concepts and you're using simple forms of the concepts in multiple contexts. For example, you want to teach math. You teach addition, subtraction, multiplication and division under five, then under six, then under twelve,

because everything reinforces another. Two plus two is six. Six divided by three is two. They all reinforce each other. You start off with a pizza slice. You add slices, you subtract slices.

The way to teach reading and math is to keep it simple and make sure you master the fundamental concepts. You work under six. Until he can do adding, subtracting, multiplication, division, fractions and decimals under six you don't move to rote counting to 100. Once you understand all those things under six, you've got the concepts of math. The numbers are so small you don't have to worry about your sequencing ability.

In general, abstract thinking is promoted by working with something the child cares a great deal about. Challenging the child to give you his opinion (rather than rote facts) and bring in the facts to support the opinion. Furthermore, help the child reason with concepts and keep the sequencing part of the task relatively undemanding, i.e. working with a pizza pie to learn math, rather than long number sequences. By focusing on affect, opinions and concepts in an emotionally relevant discovery oriented context, a child has the opportunity to make progress in their reasoning and abstract thinking skills.

## **Parent Network**

Jo Raphael, MSW, LCSW-C

*Editor's Note: This essay was written to the Floortime E-List by Diane Bayer. It is an articulate piece written from the heart and the author has generously agreed to let us share it with you.*

I had a moment of reflection yesterday and I wanted to share it with you all. My five year old son (older sibling to my younger son who has autism) and I were playing a game on the computer. It was a collaborative game and I made a mistake. My son hates to lose and became very angry

that I had done this thing to ruin his perfect game. Moms and dads are supposed to be omnipotent. Seeing me in this more realistic way made him feel quite angry and disappointed. We then had a little discussion about games being fun and not all about winning. If you talk to some soccer coaches out

there...I am not sure that message would be conveyed. We also talked about how nobody is perfect, not moms, not dads, not teachers and how he himself would never be perfect. He looked at me in disbelief and told me quite frankly, that this did not make him happy. It was like...well, if I can't strive for perfection then what is the point? It is a question I think about myself at times.

Having the opportunity to work with my autistic son has taught me some of the answers to that question. Over this past year I have had to accept the unacceptable...that I cannot fix everything that I want to, that some things are not in my control. The one thing I do have control over is my attitude and belief system. If I am acting in desperation to be perfect and to create the perfect boy, defined by some as being not autistic or normal.... then I lose the ability to appreciate the process. I went to one conference where a mom talked about her daughter who was now in the process of recovery. She was asked if recovery had been her goal. She said, No, my goal was that tomorrow my daughter learn more than she did today. If we have expectations of how it absolutely has to be.... you know life will dish out the hurdles to make that not so. If perfection is the goal...then every day will be a disappointment instead of an opportunity. If perfection is the goal then the blinders of expectation will not allow for opportunity to show itself. If perfection is the goal then some people won't even enter the race for fear of failure. It is not about right and wrong and wondering how things might fail...it is about diving in there and getting to work. The old adage that you learn from your mistakes holds true here in working with kids...you learn over time what will work and what will not. Maybe "mistake" is an improper term here. Some things you do will have better

consequences than others. You learn by doing. You don't know what will work until you get in there and try.

One of the most important things I have learned then, by working with my son, is to let go of perfection. Perfection is not necessary to achieve my dreams. The outcome is less important to me than the process. I want to enjoy the process and my child. No wonder us parents feel so horribly when we see these "tests" on intelligence and how well they built a block tower or if they know how to have proper grasp on a pencil. Where are the tests to show that a child is...more alive and receptive to life. Where are the tests that show that my son is happy and is able to show love? If we keep holding up these standardized measures of the "perfect" child with perfect

scores on a test...we miss out on what makes life joyful. We miss out on our child's unique capabilities and gifts. I am not saying that practical matters like being toilet trained or being able to write one's name are not important. They are, and they need to be taught as well..but having these skills do not make a person. We are not building masters of skill sets, we are helping to develop people.

The irony for me is that when I let go of expectations of a certain outcome I was more confident in helping my son. I never let go of hope or of my dream in the process. Hope and dreams are the leaps of faith from the present to the uncertain future. You can fill that chasm with expectations of the ego and be continually disappointed in outcomes that never match perfection, or you can fill it with being content with working towards a dream.

As I write this my son has on a winter ski hat with a pom pom on it and scarf trailing him around his neck, running laps around the house. This is life! Isn't it great?

## The 'Neurological Comfort Zone' & The Autistic Child's World View

Richard Solomon, M.D.

Over the last 12 years, as a developmental and behavioral pediatrician I have had the privilege of working clinically with hundreds of children with autistic spectrum disorders (ASD) and their families. Over this time, I have also closely followed research into the causes of autism. In this article, I hope to integrate some scientific data and clinical anecdotes. I hope to show that by understanding the basic science of autism—what I am calling the 'Neurological Comfort Zone (NCZ)'—we, as parents and professionals, can better understand the autistic child's worldview. By understanding their worldview, we can better relate to them and help them better relate to us. In so doing, children with Autistic Spectrum Disorders can permanently improve function in all areas including language, social skills, sensory integration and motor planning. I believe that effective interventions *probably* lead to a change in the child's neurology and brain functioning, though this remains to be seen. Finally, this integrated approach encourages us, as parents and professionals, to understand the child's deepest motivations, to appreciate his or her strengths and weaknesses, and to respect the child's individuality. Let me begin with a vignette.

I walk into the examining room and 4 year old Kiran is moving around the room with a little blue wagon in his hand, rolling its' wheels on various surfaces and carefully watching as the wheels turn. I say hello to him. He does not ignore me: he truly acts as if I am not there. His parents tell him to 'Say hello to Dr. Solomon' but again he acts as if he is deaf. (Indeed, they have had his hearing tested three times.) Very

slowly, after persistent, gentle attempts by me to follow his lead, engage him (mostly in sensory-motor play) and have fun, Kiran comes out of his 'comfort zone', at first very briefly and tentatively, then for longer periods of time, intermittently returning to apparently complete, self-absorption. By the end of the visit, we are playing together, interacting, back and forth with only short returns to his 'comfort zone'. He is talking in multiple word phrases, and expresses strong, complex emotions, of both pleasure and anger.

Kiran's behavior is a reflection of the particular style found in one group of children with autism. It's as if they shut down automatically when they are overwhelmed by too much stimulation. They return to their 'neurological comfort zone' where they may feel more comfortable at the cost of a loss of relationship, interaction, and spontaneity. They don't seem to be thinking about it. It's not volitional but presents as a type of on/off switch. It seems to me to be neurological. We all have this built in, automatic, sense of 'neurological comfort', a realm of unconscious retreat from the overwhelming. The difference is some children with autism act as if this is a dominant mode of behavior. When we attempt to relate beyond their capacities, and elicit strong emotions, the limbic system reaches a limit and the child cannot relate. He or she becomes stuck in their neurological comfort zone. We are learning that the neuronal branching may be limited in language areas, especially in the left temporal lobe, so meaningful speech is limited. We are finding evidence that rapid shifts of attention may be

mediated by cerebellar structures, making responsiveness to complex contingencies difficult.

This neuronal behavior is probably coded for genetically. In fact, I have seen many twins with autism; and, while most of the children are normal appearing, as many as 40% may have abnormal EEGs. A significant minority has related genetic involvement including syndromes like Fragile X and tuberous sclerosis as well as non-specific forms of mental or cognitive handicap. Children with autism very frequently have associated difficulties with verbal dyspraxias, motor planning in-coordination, and sensory hyper- and hypo-sensitivities. Recent research strongly suggests that 'autism genes' code for brain cell distribution, neuron branching and neuro-transmitter function which, in turn, defines a set of neuropsychological strengths and weaknesses. Strengths often have to do with left brain functions, visual spatial ability, and 'folk physic' skills (e.g. doing puzzles, identifying letters, numbers, being mechanically astute etc.). Weaknesses seem to be 'right brained' having to do with non-verbal language and communication skills (e.g. reading social cues, expressing complex language, etc.). Consistent findings from functional MRI's, autopsies, PET scans on adults with autism and other brain probes point to key areas of the brain (i.e. the limbic system, speech/language areas, certain areas of the frontal lobe executive function and the cerebellum) that are affected. Children with autism have 'neuronal packing', with stunted bundles of neurons perhaps explaining the large head circumference of many children with autism. There is speculation that these autism genes code for the most complex of human functions, namely language and socialization. Thus, in genetic language, there can be more complete penetration or expression of the gene that results in severe autism,

whereas *incomplete* penetration may result in PDD/pervasive developmental disorder or mild autism or, at the mildest end of the spectrum, Asperger's Syndrome. Thus, when children with autism reach the limit of their neurological abilities to relate they retreat into their 'neurological comfort zone'.

This neurological understanding is very helpful in describing to parents and professionals how their child with autism thinks and thus how they as parents can appropriately engage their child in interactions. I explain that children with autism differ from more neuro-typical children in that they seek sameness—which *is* safe, and which *is* their NCZ. Whereas neuro-typical children seek novelty, and assess the risk of stimulation using their relationships with their parents. Neuro-typical children are not as concerned with safety and sameness to similar extent because they are not so easily overwhelmed. It explains why children have repetitive behaviors, why they don't change unless helped and why they can change, often dramatically, when they are helped especially during intensive, relationship based behavioral interventions. I give a one-page graphic to parents (and professionals for that matter) entitled 'The Autistic Child's World View'. The picture is a series of concentric circles. The inner most circle is labeled 'The Comfort Zone', the next circle right around the 'comfort zone' is called '**Sensory Motor Play**', then comes '**Games**', then '**Language**' followed in ever increasing size by '**Imagination**', '**Simple relationships**' and finally '**Complex Relationships**'. This enlarging pattern of development that evolves from more basic to more complex has a sound theoretical and clinical basis in the works of Greenspan, Prizant & Wetherby, and McDonald, to cite just a few of the clinical researchers. In my graphic there are two arrows; one pointing from the edge of the outer circle

into the child's comfort, labeled 'Perseveration' (i.e. repetitive behaviors) and one pointing out from the comfort zone to the periphery called 'Engagement'.

Having given this graphic to Kiran's parents, I told them that the concentric circles represent Kiran's world view. The secret to a developmental, individualized and relationship oriented (DIR) interaction with him depends on 'engagement', that is, meeting him where he's at and taking him where he needs to go. Kiran's most fundamental neurological structures were intact. I encouraged his parents to first play with a **sensory motor focus** including spinning, jumping, rubbing, shaking, pressure, etc. When Kiran seemed completely comfortable in the interactions at this level, his parents turned this play into repetitive **games**. To these games they added **language** and, soon, his parents, and therapists were having fun in a simple back and

forth relationship with Kiran. Over time, with skill, and a strategic behavioral approach, Kiran and a majority of children can be wooed out of their neurological comfort zones into complex relationships. Sometime the intervention may move too fast, and Kiran might then turn off, persevere and return to his comfort zones. Over time as his comfort zones increases, however, and he had a wider repertoire of interests, this perseverative behavior may decrease. In some children it disappears altogether.

In summary then, autistic spectrum disorders are probably genetic, neurological disorders that create, in the child, a world view that appears to be radically different from ours, *but in fact proves to be accessible*. When his parents patiently explored Kiran's likes and dislikes, they were able to appreciate what types of interactions were within his comfort zone and could help him expand his comfort zone.

### **Book Review:**

Tal Baz M.A. OTR/L

Tal Baz is an occupational therapist in private practice in the Chicago area.

### **“Sensory Integration and Self-Regulation in Infants and Toddlers: Helping Very Young Children Interact With Their Environment”**

G. Gordon Williamson and Marie E. Anzalone

As occupational therapists working with children with regulatory disorders we always find ourselves trying to integrate two bodies of knowledge, each one more complex, variable, and multi-layered than the other. I am talking about sensory integration, on the one hand, and the emotional-behavioral aspects of disorder and therapy, on the other. This is not an easy task even for the most experienced of us! I therefore welcome

with excitement the attempt at exactly such an integration, made by Gordon Williamson and Marie Anzalone; excitement, more particularly, for the vivid, elaborated, and articulated way in which they have laid out their contextual approach to the process of Sensory Integration, weaved at the core of this process the “four A’s” (arousal, attention, affect and action), described the sensory modulation and praxis patterns that unfold in it, and related

those patterns to DC:0-3 regulatory diagnosis. This theoretical background is then used for an elucidation of the assessment and treatment procedures that would be helpful even for novice therapists.

Though not explicitly purporting to be doing so, the authors achieved a synthesis between diverse fields of research and practice (occupational therapy, neuroscience, child development, psychology, psychiatry, education, and movement sciences), may contribute to the interdisciplinary project aimed at achieving a holistic understanding of development.

In the first chapter, "Sensory Systems and Sensory Integration", the authors give a synopsis of the seven sensory systems (visual, auditory, vestibular, proprioceptive, tactile, gustatory, and olfactory), emphasizing the three main systems that contribute to Somatosensation – the vestibular, the proprioceptive, and the tactile. I find it unfortunate that the chapter does not include some of the more recent knowledge about the anatomical, physiological, and functional connections between the auditory and the vestibular systems, and about the ways in which the former contributes to somatosensation in a host of intricate ways.<sup>1</sup>

At the end of the chapter the authors state that "Whereas sensory input is usually studied or discussed in terms of a single modality, in reality the central nervous system does not perceive or register sensation as isolated modalities" (p. 13). This is a crucial point that should be emphasized. The literal meaning of 'Sensory Integration' suggests a process whereby different and differentiated sensory modalities become integrated, and no doubt there is some theoretical usefulness to thinking of development

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<sup>1</sup> Frick S., and Hacker C., Listening with the Whole Body (in print).

as such a process. But in real life, the phenomenology, as well as the neurology, of our senses is always, from its very root, a gestalt; a gestalt, moreover, that is not only multi-sensory, but also involves affect. When the authors conceptualize the five sequential steps in which the process of sensory integration occurs: sensory registration, orientation and attention, interpretation, organization of response, and execution of the response, they miss this point. The authors present this process as a more or less mechanical and cognitive one. Current literature, however, especially in the field of infant mental health, suggests that the process is in fact grounded in intersubjective-emotional experiences.

In the second chapter "Observing Sensory Based Behavior in Infants and Young Children in Context", the authors elaborate on the "Four A's" and emphasize their perception of these four processes as having equal contributions to behavioral organization. This is right only given the authors' narrow conceptualization of Affect (one of the four A's) as "the emotional component of behavior" (p. 21). But conceptualizing Affect thus narrowly, leads to a neglect of the tremendous power and importance of what has been called in recent literature "Moments of Meeting",<sup>2</sup> and of the parallel, on the neurological level, of such moments—what Allan Schore has called "the process of Entrainment".<sup>3</sup>

At the opening of the third chapter, "Patterns of Sensory

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<sup>2</sup> Stern, D.N. (1985) The Process of Therapeutic Change Involving Implicit Relational Knowledge: Some Implications of Developmental Observations for Adult Psychotherapy. *Infant Mental Health Journal*, 19, 300-308.

<sup>3</sup> Schore, A.N. (1996) The Experience Dependent Maturation of a Regulatory System in the Orbital Prefrontal Cortex and the Origin of Developmental Psychopathology. *Development and Psychopathology*, 8, 59-87.

Integration”, the authors offer a beautiful discussion of sensory modulation and sensory thresholds, and build on that discussion in their delineations of the different sensory modulation profiles. These patterns tend to be oversimplified by therapists and parents alike, a tendency that impacts greatly on the process of clinical reasoning within the therapeutic context, as well as on recommendations for home and school environments. The discussion of these patterns can help all of us to think about them in a more sophisticated way, and can thereby enhance our ability to distinguish between seemingly identical sensory profiles, which in fact are very different from each other.

In the second part of this chapter the authors bring in the DC:0-3 conceptualizations of Regulatory Disorders and Multisystem Developmental Disorders. They lay out the two systems (sensory integration and emotional-behavioral) side by side and try to show how a better understanding of Sensory-integration can lead to a refinement of diagnoses arrived at on the basis of DC:0-3. For example, a child who is described as “withdrawn and difficult to engage” by the criteria in DC:0-3 can have an underlying sensory profile of either hypo-reactivity, or can actually be hyper-reactive but in a physiological shutdown due to sensory overload.

It seems to me, however, that more can be done by way of integrating these two bodies of knowledge; and once again, such an integration would have to begin with a wider understanding of what affect in fact is, and how it provides a context for perceiving sensory stimuli. Sensory input is at no stage of perception “dead data”, awaiting interpretation that would bestow meaning on it. Rather, it is always already, from its very root, *meaningful*. It calls us for a particular response; but only because it is, at least

in part, already shaped by the individual’s style and manner of responsiveness.

The fourth chapter lays out the assessment process, and does a very good job at it indeed. Building on the discussion of previous chapters, it approaches the assessment process on a very broad level, and furthermore – it emphasizes the qualitative nature that these kinds of evaluations must take.

The intervention process is explored in the fifth chapter. This chapter covers: collaborative work with the parents, the modification of the physical environments (including sensory diets), and direct intervention. In addition to some wonderful practical advice, I found two ideas that I thought were very insightful. One is that “Since [the therapeutic process] evolves from the interaction the practitioner, the child, and the environment, sensory integrative intervention cannot be pre-planned” (p. 87). The other is that “Sensory integrative treatment is best learned in a mentored clinical setting from an experienced practitioner and not through traditional continuing education conferences that rely on lectures.” (p. 86). I think that both these claims must be taken seriously by policy makers and the trainers of professionals on all levels. Good sensory integration treatment is based first and foremost on clinical reasoning skills, and those can be learned and refined only within the context of interpersonal experiences, such as clinical supervision.

Overall this is a most valuable monograph for everyone that appreciates the PROCESS of UNDERSTANDING PROCESSES, especially those that are intricate and elusive as sensory integration and regulation. It sheds light and organizes knowledge, and at the same time opens up more questions to be asked.