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ABSTRACT

This newsletter issue presents five articles addressing intervention with infants and toddlers having pervasive developmental disabilities. The first article is by Stanley I. Greenspan and is titled "Reconsidering the Diagnosis and Treatment of Very Young Children with Autistic Spectrum or Pervasive Developmental Disorder." This article explains a developmental model of these disorders, a treatment approach which has demonstrated substantial success, and principles of intervention. The second article is by Serena Wieder and is titled "Opening the Door: Approaches To Engage Children with Multisystem Developmental Disorders." It considers characteristics of these children, the meaning of early behavior, ways to foster these children's learning of new meanings and play skills, the development of symbolic functioning, and related therapies. The third article is a detailed case study by Rebecca Shahmoon Shanok, titled "Simon: Intensive, Multi-faceted Therapy with a Developmentally Delayed Little Boy." Next, Barbara Kalmanson, in "Diagnosis and Treatment of Infants and Young Children with Pervasive Developmental Disorders," focuses on the parent's subjective experiences of this type of child and ways to help these parents develop effective parent-child relationships. The last article is "Approaches to the Development of Social Communication in Foster Children with Pervasive Developmental Disorder" by Jaswinder Kaur Ghuman and Wendy G. Kates. Also included are excerpts from a new book "Heart Start: The Emotional Foundations of School Readiness." (DB)

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Reconsidering the Diagnosis and Treatment of Very Young Children with Autistic Spectrum or Pervasive Developmental Disorder

ROBERT MAUST

Stanley I. Greenspan, M.D.

Very young children who have severe relationship and communication problems, in addition to motor, sensory, and cognitive difficulties, perplex and challenge their families and professionals.

Not infrequently, parents will report to a professional their concern about a two-and-a-half-year-old who is not developing language, doesn't look at or relate to them, and shows no interest in peers. Asked about the child's earlier development, parents often recall that development in the first year of life was "typical." Their child enjoyed hugging and cuddling and began purposeful gesturing. Family videotapes often document these recollections (infrequently, the difficulties began much earlier). But between 12 and 15 months, the child's preverbal, gestural system of communication stopped developing. The toddler did not, for example, grab a parent's hand, lead her to the refrigerator, and vocalize and/or gesture for a certain food. At the same time, parents report, their child began evidencing (or intensifying already existing) oversensitivities to certain sounds or kinds of touch; the child no longer seemed to understand even simple words or gestures. Language stopped developing. Gradually, parents noticed that the child became increasingly withdrawn, aimless and perseverative.

Fortunately, as the articles in this issue of *Zero to Three* illustrate, our understanding of these children is growing, and intensive, integrated treatment approaches are helping many children make extraordinary developmental progress, the most remarkable of which is their ability to relate to others with warmth, pleasure, empathy, and growing emotional flexibility.

Contents

For reasons not yet entirely clear, but that may go beyond improved early identification services, programs serving infants, young children and their families are reporting being challenged by more and more children with severe relationship and communication problems. Many of the behaviors these children evidence were originally described by Kanner as autistic. According to Kanner, "The outstanding 'pathognomonic' fundamental disorder is the children's inability to relate ... from the beginning of life ... an extreme autistic aloneness that ... disregards, ignores, shuts out anything ... from the outside." (Kanner, 1943). These behaviors are systematized in the *American Psychiatric Association Diagnostic Manual's* (DSM-III)R) category—Pervasive Developmental Disorder (PDD). The PDD category has two subtypes: Autistic Disorder (the more classic and severe form) and Pervasive Developmental Disorder Not Otherwise Specified (PDDNOS) (the more general type which is diagnosed when there is a basic impairment in relating and communicating, but all the formal criteria for autistic disorder are not met). Currently, most children with severe relationship and communication problems are diagnosed as having one of these two subtypes of PDD.

> *Infant/family programs are seeing more and more children with severe relationship and communication problems.*

Yet as we see more children diagnosed as PDD at younger ages, there are clinical features that challenge the existing conceptual framework. Children are presenting with a continuum of relationship and affect expression patterns rather than one distinct type. Interestingly, clinicians, because of the lack of more appropriate diagnostic categories, use PDDNOS for many children who have various combinations of social, language and cognitive dysfunctions, even when there are varying degrees of social relatedness. Parents, however, are very aware that autism and PDDNOS are part of the same broad PDD category.

For the majority of children, the relationship problem is not clearly in evidence in the first year of life (as thought by Kanner) but occurs more often in the second and third years, in connection with difficulties with processing sensations. Furthermore, each child has his or her own unique profile for processing sensations (i.e., "regulatory" profile). This includes differences in sensory reactivity (e.g., tactile, auditory, visual), sensory processing (e.g., auditory/verbal, visual/spatial), and motor tone and motor planning. Most importantly, the assumption that children with PDD, for the most part, remain relatively unrelated to others, rigid, mechanical, and idiosyncratic (as stated in DSM-III-R) is not supported by our recent clinical experience. With early diagnosis and a comprehensive integrated relationship-based treatment approach, children originally diagnosed as PDD

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are learning to relate to others with warmth, empathy and emotional flexibility—characteristics that run contrary to the very definition of PDD and that have been thought to be possible only for an exceptional few. A number of children we have been working with, diagnosed as autistic or PDD NOS between ages 18 months and 30 months, who are now five to seven years old, are fully communicative (using complex sentences adaptively), warm, loving and joyful. They attend regular schools, are mastering the early academic tasks, are enjoying friendships and are especially adept at imaginative play. While it is not yet clear what percentage of children will be capable of these types of cognitive gains, significantly, the capacity to become comfortable with closeness and dependency, and even become joyful, appears to be attainable, often early in the treatment program, no matter what the rate of cognitive and language gains. In addition, cognitive potential cannot be explored until interactive experiences are routine.

> *All diagnostic assessments of young children should include careful observation of interactive play between caregiver and child.*

The traditional pessimistic prognosis for PDD has been based on experience with children who tend to begin treatment at slightly older ages (later than between 18 and 30 months), and who received more mechanical, structured treatment approaches rather than relationship, affect cuing based approaches. The possibility must be considered that approaches which do not pull the child into *spontaneous* joyful relationship patterns may intensify rather than remediate the child's difficulty. Even with older PDD type children who appear quite fixed in their perseverative patterns, as more gestural and/or verbal interactions get going, the perseverative and idiosyncratic behavior decreases and adaptive behavior increases, as does the general sense of relatedness.

The fact that there appears to be a continuum of relationship and communication problems rather than sharp qualitative differences, significant individual differences in each child, and greater potential for emotional growth than formerly thought, mandates that we reconsider our long-held assumptions about PDD. It is especially important to reconsider the notions that there is a fixed biological deficit in the capacity to form an interactive relationship, that there is almost always either only minimal progress or chronic deterioration, and that these children are not capable of real emotional warmth, love and sensitivity in the way other children are.

It is crucial that all diagnostic assessments of young children include careful observation of interactive play between caregiver and child as well as clinician and child. Where this is not done, as has been the case with a number of children whom I have seen recently, clinicians have failed

Editor's note:

The contributors to this issue of *Zero to Three* offer us ways to understand and support the development of infants and young children who have difficulties in communicating with others and in human relationships, combined with motor, sensory, and cognitive problems. Stanley Greenspan, Serena Wieder, Rebecca Shahmoon Shanok, Barbara Kalmanson, Jaswinder Ghuman, and Wendy Kates challenge us to consider some issues that have implications not only for these children but throughout our field.

These issues include:

- **Learning from each other**—No single professional can hope to absorb the full multidisciplinary literature, master the range of therapeutic techniques, and evaluate all promising conceptual and treatment hypotheses concerning infants and young children with pervasive and multisystem developmental disorders. The parents and professionals whose experiences are reflected in this issue are committed to learning from each other's experience, and to working together respectfully on behalf of vulnerable children.
- **The complicated relationship between theoretical models and direct observation**—We need theories, hypotheses, and systems of diagnostic classification to help us order our perceptions of developing young children and their families and suggest effective intervention approaches. But we must also recognize that when the model in our heads does not sufficiently correspond to the children and families before our eyes, then we need to reconsider the model, in the search for growth-promoting approaches.
- **The need to serve typically and atypically developing young children within adequately staffed, developmentally appropriate settings**—The articles in this issue remind us of very young children's tremendous potential for healthy adaptation. They also illustrate the precariousness of hard-won developmental achievements. All infants, toddlers, and their families need appropriate, competent support to master the critical challenges of the earliest years of life. Inadequately staffed and organized programs can harm not only children with disabilities but also typically developing children; in this sense all infants and toddlers are "at risk."
- **Investing in infants, toddlers, and their families**—Some might argue that the intensive, comprehensive treatment approaches for infants, toddlers, and their families that the contributors to this issue recommend are "too expensive." This is an old story: The same decision makers who declare the costs of prevention, and of treatment approaches involving substantial personal contact, exorbitant will often end up paying for high-tech procedures and institutional care after the fact.

Investing in specialized care for vulnerable infants and toddlers and their families is costly. But too expensive? Compared to what?

We would like to acknowledge Stanley Greenspan's special contribution to this issue of *Zero to Three*. His own essay reflects his extensive experience in observing and treating infants and young children with pervasive and multisystem developmental disorders. He has also been the teacher and/or colleague of other contributors.

Finally, we would like to invite parents, practitioners from all disciplines, and researchers to share their own perspectives on understanding and supporting the development of infants and toddlers with communications and relationship difficulties, as well as other developmental challenges. Ideas can be shared through Letters to the Editor. We also welcome suggestions for articles that might be published in forthcoming issues of *Zero to Three*.

to identify children's emerging capacities to relate warmly and intimately with parents or other familiar caregivers, and misdiagnoses, leading to inappropriate treatment recommendations, have been made.

A developmental model

A hypothesis to consider is that while the child's unique, biologically based way of processing and organizing experiences predisposes him to relationship and communication difficulties and perseverative and idiosyncratic behaviors, it is the types of interactions, or lack thereof, that bring the child's biology into an experiential context. And it is his experiences that determine much of how the child feels and behaves.

An infant, toddler or preschooler's auditory/verbal, visual/spatial and/or perceptual/motor processing difficulties may make ordinary relating and communication challenging. The people in her immediate environment often will not be able to find some special way to engage and interact with her. Vital social learning may not, therefore, occur during important periods of development. For example, critical social skills, such as reciprocal gesturing and comprehending the "rules" of complex social interactions are learned at an especially rapid rate between 12 and 24 months. A deficit in these skills could easily look like a biological deficit rather than a reaction to underlying regulatory difficulties (which may have a biological basis).

> *The therapeutic program must begin as soon as possible.*

By the time these children come to professional attention, their challenging interaction patterns with their caregivers may be intensifying their difficulties. They are likely to perplex, confuse, frustrate, and undermine purposeful, interactive communication of even very competent parents. Parents often rely as much on the child's communicative signals as the child relies on the parents' signals. Parents are not prepared for a toddler who looks away or withdraws. Losing engagement and intentional, interactive relatedness to key caregivers, the children seem to withdraw more idiosyncratically into their own world. This hypothesis suggests, therefore, that there are biologically based regulatory difficulties which contribute to, but are not decisive in determining, the relationship and communication difficulties. When problems are perceived early, caregivers and children, with appropriate professional help, can learn to work around the regulatory dysfunctions and their associated relationship and communication problems, and form varying degrees of warm, empathetic and satisfying relationships.

In order to recognize the range of different difficulties one observes in children with these regulatory patterns, it may be useful to consider two broad types of disorders:

Regulatory Disorders are present when children have the regulatory variations described above, but can nevertheless relate to others and communicate in an age-appropriate fashion.

Multisystem Developmental Delay can be used to describe children who, as part of a severe regulatory dysfunction, also evidence disturbances in relating and communicating. Multisystem Developmental Delay being a self-evident descriptive term does not carry the negative connotations of autism or PDD, and does not rest on a questionable assumption that these types of children are not capable of love, warmth and comfort with dependency. It may help us take a fresh look at the phenomenon often classified as autism.

Treatment program

A comprehensive treatment program for infants, toddlers and pre-schoolers with these problems involves helping the child reestablish the developmental sequence which went awry. For many children this means establishing a relationship with two-way communication (simple gestures progressing to complex ones and then symbols). This involves patiently working around and with his sensory processing and other regulatory difficulties to establish a pleasurable sense of attention and engagement. Following the child's lead and supporting his spontaneity, internal motivation, and affective expression in free play and unstructured interactions are the vehicles for accomplishing this task. This approach may require enormous ingenuity and persistence when a child's behavior consists of wandering about aimlessly or perseveratively rubbing a favorite object. But such basic strategies as comforting, wooing, and getting in the way of the aimless wanderer or clamping one's own hand on the perseverative rubber's object of desire (so that the child has to deal with one) may create the spontaneous, self-motivated interaction that will restart the developmental process.

The therapeutic program must begin as soon as possible. The more quickly these children and their parents are re-engaged in emotional interactions that use their emerging, but not fully developing, capacities for communication (initially with gestures rather than words), the better they do. The longer such children remain uncommunicative, and the more parents lose their sense of their child's earlier relatedness, the more deeply the children withdraw, and the more perseverative and idiosyncratic they become.

To spend months assessing a child, or waiting to see how the child does on his own, before beginning treatment is to waste critical time. Unless there is strong indication that adaptive development is proceeding on its own or the delay is limited only to a narrow aspect of language or motor behavior, there is no time to "wait and see." When very young children with severe difficulties in relating and communicating come to professional attention, assessment and appropriate intervention must be begun **within days**. Often, interventions can be started while assessments are in progress.

A comprehensive program may include interactive play therapy (3 to 5 times per week) often involving both child and parents, speech therapy (3 to 5 times per week), occupational therapy (2 to 5 times per week), and parent counseling. During the preschool years, an important component of such a program is an integrated (i.e., ¼ of the class of children with special needs and ¾ of the class of children without special needs) preschool which has teachers especially gifted in interacting with challenging children and working with them on interactional gesturing and affective cuing and early symbolic communication, as well as speech/language therapy, occupational therapy, and special education components. In such a program, the children with these patterns interact with children who are fully interactional and communicative. As a child reaches out for relationships, there are peers who reach back.

In order to help in the initiation of or return to an adaptive pattern of social development, there are a number of important challenges that must be met. These involve helping the child learn to attend, relate, interact, experience a range of feelings, and ultimately think and relate in an organized and logical manner. These challenges involve the caregivers' and therapist's awareness of the steps the child needs to master his core developmental competencies.

Before looking at how one can help this most challenging group of children master their core developmental processes, it may be useful to identify some of the common strategies that are often **unhelpful.**

One of the most common unhelpful approaches is to lose sight of the developmental progression the child needs, and instead, to zoom in on particular skills in a fragmented or isolated way. For example, a child may be aimless and distracted. A parent or therapist may be trying to get the child to put a square block in a square hole. The child may do everything but look at the adult and try to copy what the adult is doing. Frustrated by the child's inattentiveness, the therapist or parent (often the parent copies the therapist) may hold the child's face and insist that the child look at him or her. Next one may try to get the child to listen by talking in a repetitive monotone (much like a computer voice in a tram car at an airport). If the therapist has been influenced by behavioral schools of thought, he may add on a reward every time the child does look at him. The therapist might offer verbal praise (also delivered in a computerized monotone), "Good boy. Good boy. Good boy," as well as a piece of candy or other treat.

With such mechanical and rigid approaches it is not atypical for children with autistic spectrum/pervasive developmental disorder patterns to become more stereotyped and more perseverative as they grow. One needs to consider the hypothesis that the types of overly rigid and structured interventions that have been organized on behalf of these infants and children in part support rather than remediate their more mechanical behavior.

In addition, there is a tendency even among the most relationship-oriented therapists to ignore the delayed child's core needs and developmental level. The therapist assumes that he or she can form a relationship with the child by simply positioning himself next to the child and perhaps copying and/or commenting on what the child is doing. He might say, "Oh, Johnny is putting one block on top of the other. Oh, Johnny is knocking it down now. Now Johnny is building it up again." He may even say, "Oh boy, Johnny is angry at the blocks," or "Now Johnny likes the blocks." Meanwhile, the child may not look at the adult, show little or no emotion, and not necessarily take in what is being said. A therapist and a child may go on in this fashion for weeks, months, and possibly even years, with very little movement or gain. The problem is that the child who is not yet functioning at a symbolic level or even at a level that involves complex interactive gestures is being approached as though she understands more than she does. She will sense some warmth, but little else. What occurs is a type of parallel play between therapist and child, rather than true interactional play.

The primary goal of intervention is to enable children to form a sense of their own personhood.

The tendency to work on "splinter" skills (an isolated, often rote-learned cognitive capacity) is another way of working developmentally "above" a child. The parent understandably wants his cognitively and language-delayed child to appear more normal. The therapist would also like some signs of intellectual brilliance from a delayed youngster. Together they may help the child to master certain splinter skills, such as having a child say the days of the week or recognize certain letters or words, or memorize the contents of a book. However, a change of place or context or even the verbal sequence used to elicit the behavior will take away the child's ability to recognize the letters or read the book in any but a concrete and perseverative way. At the same time, more basic interactive skills that would serve as a foundation for true thinking and communicating are ignored.

Principles of intervention

The primary goal of intervention is to enable children to form a sense of their own personhood—a sense of themselves as intentional, interactive individuals. The sense of one's personhood evolves from the infant's or young child's ability to abstract from his seemingly infinite number of affective interactions with his caregivers. This sense of "personhood" seems initially to organize itself around physical sensations, a sense of connection to others and a sense of intentionality (two-way communication, involving the use of simple and complex gestures). Next it would define itself in terms of emerging representations or symbols as they became organized and differentiated. As the sense of personhood evolves, earlier and more fundamental levels serve as a foundation for newer levels.

Intervention with children with challenges requires one to remember that their sense of their own being derives not simply from their language functioning or their motor functioning or their cognition. Working with each or any of these areas in isolation may only continue a sense of fragmentation. Their sense of themselves derives from how they utilize their bodies as part of intentional engagements and interactions and how they organize the affects these interactions generate. Not only emotional capacities, but cognitive ones such as the ability to think and reason, are based on the child's ability to abstract from his own affective experience. One must, therefore, always ask how any intervention affects the child's ability to abstract and organize an emotional, sensation-based experience of who he is. Because these children often lack the most basic foundation for interpersonal experiences (that is, they are often not interactive in the purposeful way that ordinary eight-month-olds are), much of the experience that they might use to abstract a sense of their own personhood is not available to them.

Therefore, for these children, the earliest therapeutic goals must be geared to the first steps in the developmental progression, that is, to foster focus and concentration, engagement with the human world, and two-way intentional communication (and then symbolic levels) in order to create the interactive experiences the child can use to abstract a sense of who he or she is.

As one fosters focus and engagement, one must pay attention to the child's regulatory difficulties. For example, if he is overreactive to sound, talking to him in a normal loud voice may lead him to become more aimless and more withdrawn. If he is overreactive to sights, bright lights and even very animated facial expressions may be overwhelming for him. On the other hand, if he is underreactive to sensations of sound and visual/spatial input, talking in a strong voice and using animated facial expressions in a well-lit room may help him attend. Similarly, in terms of his receptive language skills, if he is already at the point where he can decode a complex rhythm, making interesting sounds in complex patterns may be helpful. On the other hand, if he can only decode very simple, two-sequence rhythms, and perhaps understands a single word here and there, using single words (not as symbolic communication, but as gestural communication) and using simple patterns of sound may help him engage.

One may find that he remains relatively better focused in motion, such as being swung. Certain movement rhythms may be more effective than others. For some children, fast rhythms, such as one swing per second, may be ideal. For others, slow rhythms, similar to the breathing rate (one swing every four or five or six seconds) may be ideal. Different kinds of tactile input may foster concentration and focus, such as firm pressure on the back or the arms or the legs. Large motor movement and joint compressing may also foster attending (i.e., jumping on the bed, or any trampoline-like motion). Each infant and child is unique.

It is especially difficult to foster a sense of intimacy. Here, as one helps a child attend and engage, it is critically important to take advantage of a child's own natural interests. Follow the child's lead and look for opportunities for that visceral sense of pleasure and intimacy that leads a child to *want* to relate to the human world. Intimacy can be supported as one works on forming simple and then more complex, gestural communications.

For example, the father of a very withdrawn child was only verbalizing to his child. The therapist suggested trying simple gestural interactions first. The father put his hand on a toy car very gently, as his son was exploring it, and pointed to a particular part, as though to say, "What's that?" But in pointing, the father actually moved the car, so the son felt the car moving in his hands and noticed without upset his father's involvement. The son took the car back but looked at where the father had touched with his fingers. This more physical, gestural communication seemed to get at least a faint circle of communication opened and closed—the son's interest in the car, the father's pointing to a spot on the car, moving it a little, and the son's looking at that particular spot, even though he took the car back—which, incidently was also a circle-closing response. *Opening and closing circles of communication* is the primary unit of gestural interaction, and it creates a foundation for all subsequent communication.

After getting this minimal interaction going, as the son was moving the car back and forth, the father got another car and started moving it back and forth next to his son.

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The father had his car move toward his son's car, but did not crash into it. The son initially pulled his car out of the way but then moved his car fast as his father had, toward his father's car. Now three or four circles were closed in a row and a real interaction was beginning.

Next one fosters the movement from gestures to symbols. As father and son were using the car for simple and complex gestures, the father started to say, "fast" and "slow" to describe his own action. When he moved it fast, he said "fast," and when he moved it slow, he said "slow." After four or five repetitions, the boy boomed his car into his father's car and said the word *fast*, although not pronouncing it quite clearly. The father beamed. He was amazed that his son could learn a new word and use it appropriately so quickly. Words and symbols *can* be learned quickly, if they are related to the child's actual experiences and built on the child's gestures. Words in isolation or as imposed labels have little meaning for the child.

A major challenge for therapists and parents is the child's tendency to perseverate. One child would only open and close a door. Another would only bang blocks together. How do you work with such patterns—do you try to get the child to do something else and get into a power struggle? The key is to make the perseveration an interaction. Then it is no longer perseverative. Use the child's intense motivation to his advantage and get gestural circles of communication opened and closed. For example, get stuck in his door or get your hands caught between the blocks. Be gentle and playful as he tries to get you out of his way (like a cat and mouse game). Gestural interactions will be occurring, and his behavior will be strikingly purposeful and affective, even though the affect may be annoyance or anger. You welcome *all* human feelings. You do modulate them, however, and help soothe and comfort as well.

Another challenge, as one moves toward more representational or symbolic elaboration, is to help the child differentiate his experience. The child needs to learn cause-and-effect communication and to make connections between various representations or ideas.

Since most children with pervasive and multisystem developmental delays have difficulty with receptive language (that is, auditory processing), and some also have difficulty with visual/spatial processing, it is much easier for them to pay attention to their own ideas rather than the ideas of others. A child with this type of pattern has to work perhaps 100 times harder to take in verbal, or at times visual, information from his caregiver or therapist than to sense his own inner sensations or perceptions.

The way the child categorizes his experiences at the level of symbols or representations is through feedback. The parent becomes the representative of what is outside the child and the foundation for reality.

The clinician's or parent's ability to enter the child's symbolic world becomes the critical vehicle for fostering emotional differentiation and higher levels of abstract and logical thinking. When during pretend play the child, for example, ignores the therapist's inquiry about who sits where at the tea party, the therapist should bring the child back to the comment or question, until the child closes the symbolic circle.

Relating to the child when he is feeling strong affects is critical.

The adult might "play dumb" (a little like the TV character Columbo), and bring the child back to the point of confusion. For example, when the child has the puppet biting the head of the cat, the parent may say, "Ouch, you hurt me." Then the child looks at the tree outside, the parent may ask, "But what about the cat? What about his ouch?" If the child then says, "I'll give another ouch," and bites the cat with the puppet, the child has closed the circle of communication. If the parent then says, as the child goes back to the tree, "Don't you want to talk more about the cat?" and if the child says, "No, let's look at the tree," the child has closed yet another circle and also created a logical bridge from one set of ideas to the other. As the parent or therapist helps the child create such bridges, always following the child's lead, the child becomes more and more differentiated. But if the parent either lets the child go on his own (and becomes fragmented with the child) or becomes too rigid and controlling, differentiation may become compromised.

Relating to the child when he is feeling strong affects is critical. When a child is motivated, for example, in trying to negotiate to get a certain kind of food or to go outside, there is often an opportunity to open and close many symbolic circles. The child who is trying to open the door, because he wants to go outside and is angry that he can't, may, in the midst of crying and angry shouting, open and close twenty circles of communication. In fact, during these high states of motivation children will often be very differentiated in their thinking. It is important not to frustrate the child deliberately, but it is also important to recognize that frustration derived from a difference of opinion is a fine motivator and one that occurs naturally. Stretch the transition times and the periods of negotiation. Often a parent or therapist wants to cut short a power struggle over going outside, for example, or gives indirect feedback ("maybe . . . but why don't you look at your book?") because the child is angry and demanding. It is great for a child to be demanding as long as he is gesturally or verbally opening and closing circles. Stretch out these periods of "motivated" interaction and provide clear and direct feedback ("I want to go out"; "Not now"; "Now"; "Later"; "Not later, now," etc.). The intense affect and motivation, when combined with interactions, help the child define himself emotionally.

Children with multisystem developmental delays often find it especially difficult to shift from concrete modes of thinking or using ideas to more abstract ones, in part because they do not easily generalize from a specific experience to other similar experiences. There is a temptation to teach the child answers and repeat the same question by scripting the dialogue. Sometimes this is justified by "I don't want to confuse him with too many new questions." Parents, educators, and therapists frustrated by slow progress may wish to create an illusion of progress through the mastery of some rote-learned statements.

> *It is important to help the child build on other people's information instead of developing more idiosyncratic thinking.*

But the child can only learn to abstract and generalize through active experience. The slower the going, the more, not less, spontaneous active symbolic interaction the child needs. It is often helpful to assist the child in elaborating his communication, going from the general to the specific, always taking advantage of high states of motivation. Consider, for example, a child at play who has a toy figure sitting on a car; the child is rolling the car toward a toy building. The adult enters the play gesturally, moving another car alongside, and asks, "What's going to happen?" The child is silent. Not getting a response to this most general elaboration, the adult moves to the next level, offering alternatives. "Should we go to the garage or the house over here?" Often, with these more concrete alternatives, the child will say, "Garage" or "House" or point to one or the other. If the child remains silent, one may simplify the elaboration even further, still being careful not to tell the child what to do. As the child is moving the car, instead of oversimplifying and saying, "Okay, we are going to the garage," one might say, "Okay, the cars are going into my mouth." The child may find this silly and say, "No, the garage" or may just laugh. In either case, a nice symbolic circle has been closed.

Overview of the steps in the recovery from multisystem and pervasive development disorder

As we work with multisystem and pervasive developmental disorder children, it is important to recognize that one can facilitate their moving from one stage to another only through a certain sequence of steps. Often they begin by being withdrawn avoidant, and aimless. Next, minimal gestures are used, after the parents, caregivers, and therapists are able to foster enough sense of engagement, concentration, and focus to begin to see simple circles being opened and closed. Initially, the circles are opened and closed in a more reactive way. Slowly but surely the child's initiative takes over, particularly if the parents are careful to follow his lead. Simple gestures and an initial level of engagement and focus give way to more complex gestures—first more reactive, and then more self-initiated and assertive.

As interactive gestures become routine, one may see the child develop more detail and subtlety in his facial expressions and for the first time evidence the expressions and looks of one or both of his parents. This is a significant step in the development of his humanity.

The child moves from complex gestures to fragmented symbolic capacities. The capacity will be there one day, then it may not be there for several days; then again, there may be a word to accompany a gesture or an isolated piece of symbolic play, such as putting a puppet on the hand.

As this piecemeal capacity becomes more routine, we then see a stage that may have never been described before in accounts of the recovery of children with pervasive developmental disorder and multisystem delays—a very intense, driven, hypomanic quality in using representation or ideation. The children become needy and cling almost as though they had discovered the human world is a great place and they don't want to lose it. They can chit-chat endlessly, only the chit-chat has, as indicated earlier, a fragmented quality. Islands of representation emerge rather than organized, complete thoughts. Bridges from one set of communications to another are often not clear.

After children go through this driven stage, the intensity often evens out, particularly with more differentiation in their thinking. They become more capable of organized thought, as their affect returns to a calmer state; their emotional signaling and gesturing, as well as their use of words, appear to be more and more adaptive. However, even with this progress, the child's thinking may tend to be based on his own imagination, because he still has more difficulty receiving information from others. It is important for caregivers and therapists to help the child open and close symbolic circles, so that he can build on other people's information instead of developing more and more idiosyncratic, obsessional, and ritualistic thinking. In fact, the more he is helped through active experience to respond to the ideas and feelings of others, as well, the more flexible he becomes.

Parents of children with developmental disabilities share a number of patterns that are critical for the therapist to explore. Sometimes feelings are subtle and beneath the surface. Parents may feel depressed and withdraw from their children; they may deny their sadness and disappointment and become overly perfectionist and controlling; they may vacillate among withdrawing, states of depression, and intrusive, over-controlling patterns. In addition, each parent may have his or her own fantasies and related feelings, such as feelings of guilt: "What did I do to make my child so unresponsive?" Or of anger: "This is unfair. I've worked too hard for this to be true." The anger may be at the child; it may be at the spouse; it may be at the clinicians and service providers.

An integrated invervention program

The developmental processes described above are best supported through integrated intervention programs. But in order to support these processes, many communities need to rethink the way in which they organize early intervention and education for children with pervasive and multisystem delays and disorders, as well as for all children with disabilities. The following recommendations for a treatment and educational program for infants and young children with pervasive and multiple developmental delays and dysfunctions grow out of the developmental perspective offered above.

1. **Each child should have a multidisciplinary team comprised of a mental health professional, a speech pathologist, an occupational therapist and special educator.** Intensive work with the child and his or her family (e.g., speech therapy, occupational therapy) as described earlier is the core of the program.

2. **During part of every day, an early intervention program should focus on the interaction patterns of the infant or young child and his or her parents.**

3. **A professional should consult with the parents and other caregivers at least once a week to help with family dynamics and interactive patterns at home.**

4. **Children with disabilities should be integrated into adequately staffed, developmentally appropriate early childhood care and education programs with typically developing children of a similar chronological age or developmental level, with one or two preschool children with disabilities in a group with five typically developing children.** Grouping children with disabilities with each other may not be in the interest of any individual child, especially if a child's disability includes difficulties in communication or social interaction. As the child tries to communicate, he needs someone who can communicate back.

5. **Early interventionists, child care providers and teachers should be trained in techniques for mobilizing socially and emotionally appropriate peer-to-peer interaction, particularly between children with disabilities and typically developing children.**

Conclusion

This article has outlined some of the therapeutic issues related to children with multisystem developmental delays or pervasive developmental disorders. Underlying its recommendations is the concept of helping the child establish an inner sense of his personhood. This sense develops as the child becomes able to engage, focus and concentrate, initiate two-way interaction, use simple and complex gestures, and symbolize and differentiate his experiences.

The articles that follow will illustrate and exemplify many of these points through case studies and clinical discussions.

A more detailed discussion of the concepts and therapeutic principles and strategies presented in this article, along with clinical case studies, can be found in Infancy and Early Childhood: The Practice of Clinical Assessment and Intervention with Emotional and Developmental Challenges (Greenspan, 1992).

References and Bibliography

DeGangi, G, Porges, SW, and Greenspan, SI. 1991. Psychophysiological characteristics of the regulatory disordered infant. *Infant Behavior and Development*, April.

Greenspan, SI. 1989. *The Development of the Ego: Implications for Personality Theory, Psychopathology, and the Psychotherapeutic Process.* Madison, CT: International Universities Press.

Greenspan, SI. 1992. *Infancy and Early Childhood: The Practice of Clinical Assessment and Intervention with Emotional and Developmental Challenges.* Madison, CT: International Universities Press.

Greenspan, SI. 1991. Regulatory Disorders in Infancy and Early Childhood. In: *Methodological Issues in Controlled Studies on Effects of Prenatal Exposure to Drugs of Abuse.* Richmond, VA: National Institute on Drug Abuse (NIDA).

Kanner, L. 1985. Autistic disturbances of affective contact. In A. Donnellan (Ed.), *Classic Readings in Autism* (pp.11-50). New York: Teachers College Press. (Original work published in 1943 in *Nervous Child 2* (1943): 217-250.

Porges, SW and Greenspan, SI. 1991. Regulatory disordered infants: A common theme. In: *Methodological Issues in Controlled Studies on Effects of Prenatal Exposure to Drugs of Abuse.* Richmond, VA: National Institute on Drug Abuse (NIDA).

Spitzer, R. 1987. *Diagnostic and Statistical Manual of Mental Disorders* (DSM III-R). Washington, D.C.: American Psychiatric Association.

Opening the Door: Approaches to Engage Children with Multisystem Developmental Disorders

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Our recent reconceptualization of complex developmental problems such as autistic spectrum and pervasive developmental disorders has opened the door to new and successful treatment approaches. First of all, we can now identify the specific sensory processing dysfunctions which derail healthy development by the second year of life, just when development is becoming increasingly complex and demanding, requiring increased relatedness, communication, autonomy and thinking. Secondly, we now have a multifaceted integrated model of development to guide our assessment and treatment approaches step by step (Greenspan, 1992).

In this issue of *Zero to Three*, Stanley Greenspan presents a reconsideration of autistic and pervasive developmental disorders. In fact, this entire issue challenges readers to reexamine their assumptions about these disorders and to question the intervention approaches they are using. For parents and professionals, the question will be: How to learn more?

This article will illustrate approaches that parents, teachers, and therapists can use to open the door to the world of children with multisystem developmental disorders. By finding ways to join the child in the way he or she organizes his or her experience of the world, it is possible to once again support the processes needed for healthy development. The approaches to be described focus on how to begin sharing attention by joining what the child attends to, how to become more engaged in pleasurable and trusting ways, how to support more intentional and purposeful interaction, and how to open the door to the symbolic world. These approaches are not presented as techniques to use in and of themselves, but as possible aids to the overriding goal of reengaging the child in a reciprocal relationship which will support the child's abilities to experience the full range of emotions, themes and learning. The treatment process is both complex and long, as we accompany these children through development until they develop the abilities needed to learn and function independently. It includes ongoing intensive work with the family, the child, related therapists, the educational program, and other social and creative learning opportunities. (The other articles in this issue present in-depth cases which reflect the full range of the treatment process.) It is important to note that this article is limited to possible ways to "open the door" to **begin** engaging the child in the course of the treatment process, because this is often the most difficult step to take and requires the most patience and persistence to reach the child.

The meaning of early behavior

In infancy, experience comes through a variety of sensations, internal and external. Many of these are provided by parents who move, touch, talk to, look at, and care for their babies through numerous sensory and motor interactions which convey their feelings and are the means for developing the relationship with their infant. As a child gathers information from vision, sound, touch, movement, and the effect of gravity, the foundation for play, learning, and social interaction is formed.

Right from the start, the constitutional inclinations of infants are evident. Some fuss and disorganize, others appear placid and quiet, and still others are alert and well regulated. With maturation and responsive caregiving, most infants adapt and develop normally. But some children continue to be under- and/or overreactive to the world around them as well as their internal states. As a result, they are deprived of the essential developmental experiences needed to build the foundations and structure for healthy emotional relationships and learning.

Children with severe regulatory and multisystem developmental disorders may show a few or many common behaviors. They like to line up cars, trains, blocks and other objects into straight lines; they protest if any are moved. They seek small spaces to squish into, pulling pillows down upon themselves, or they crawl under the mattresses and couch cushions. They jump continuously or run back and forth, sure to move to the other side of the room when someone approaches. As they run, they step on objects as if they are not there. Their moves through space appear quite hazardous, but they do not get hurt. (But climbing a jungle gym may be difficult, when it is not clear where to step next or what to hold on to.) Some children lie on the floor or a sofa for long periods, as they collapse from the burden of keeping their bodies upright. Others rub objects between their hands or won't touch new objects that do not present the cool, hard surfaces they prefer. Still others appear mesmerized by the spinning of objects or their own bodies, or gently roll little toys back and forth across their bellies.

Many children cling to a favorite toy, which they must hold tightly even while exploring something new, gripping it in their hand as their fingers probe. A sudden siren or fire alarm sound brings their hands to their ears as their bodies cringe. On the other hand, they may enjoy the vibrations of a hair dryer or the breeze and sound of an air-conditioner. Haircuts and shampoos are dreaded, though swimming is enjoyed. Children may shun direct eye contact and bright lights, but holding an object close and rotating it slowly appears fascinating. Even foods become restricted to a few with familiar textures.

Often, children will object vehemently if a new route is taken to a familiar destination. They may become overwhelmed by busy, crowded places. Visiting a new place, children may turn their backs and withdraw, or tantrum. Enjoyment brings excitability and idiosyncratic movements. They may find the video tape that they have seen countless times comforting, and tune out television and the unknown. Many of these behaviors are repeated again and again and again.

For these children, things that don't change and are predictable—like the shapes of letters, video images, the sounds of a nursery tune, or the sequence of toy cars in a line—make life simpler and understandable. When one has rigid control over this very small world, life is safer. The child's perseveration can be thought of as repetition of the safe and the familiar, a massive defense against the unexpected impact of further sensations and uninterpretable demands, or the intensification of experience the child needs to feel life at all.

Each of the behaviors described above reflects specific under and over-reactivity to sensory experiences which these children have difficulty processing in normal ways. This atypical reactivity affects their relatedness, affect, communication and organization of experience. Children develop atypical behavior patterns to cope with the myriad sensations they cannot interpret or regulate successfully. For example, constant jumping, running and squishing into tight spaces provide proprioceptive and vestibular input, helping the child locate his body in space. And if it is hard to stay upright because of low body muscle tone, which causes postural insecurity, then the child will spend long periods lying on the floor. Each of these behavior patterns helps the child cope, but interferes with relating or communicating.

Because we first learn through our senses, dysregulation and inadequate sensory processing drastically affect development, especially as the child approaches two years of age. Instead of moving forward, the child with complex problems becomes more entrenched in constricted behavior patterns which often bring some lines of development to a halt. Particular sensations, the children's responses to these sensations, and the way other people respond to the children themselves become their sensation-based experience of who they are and what life is about. Changes in this status trigger alarm, flight and withdrawal, or total disorganization. It is within this difficult context that these children must learn and relate to their parents and others in the world. It is within this context that they must learn to trust dependency and find ways to survive.

The behavior of children with multisystem developmental disorders—what they choose to do—is deliberate and necessary, even though it is not intentionally communicative in a direct sense. As every parent of such a child knows, the child will respond vehemently if he meets any resistance to his organization of the world, or he will retreat. Resistance and retreat are responses. The children have very powerful relationships with their parents—as skewed, controlling, and unrewarding as they may be—and are extremely dependent on their parents' cooperation in keeping the world the same for them. Thus the issue is not that these children do not relate but that they relate straightforwardly and overtly only under certain circumstances. What appears as no response or a rejecting response from the child is a response. It is often the adult—parent or teacher—rather than the child who **stops** interacting, when he or she does not persist in finding some way to keep going and join the child.

Children with multisystem developmental disorders vary widely with respect to relatedness, interaction, affect, and communication, as well as sensory processing. Some are aimless and unrelated most of the time, lacking even simple intentional gestures. Some are intermittently related, capable some of the time of simple intentional gestures, like exchanging objects. Some can be related much of the time, their tendency to withdraw relieved by islands of warm pleasurable affect; these children are more consistently able to use simple social gestures like reaching, looking, vocalizing, and exchanging objects, and are intermittently capable of complex gestures like taking a parent to the door to leave. But almost all of these children resort to the sensory based behaviors described above to some extent.

The basic understanding of the sensory processing that underlies these children's atypical behaviors also provides openings to treatment—that is, the start of mutual attention, mutual engagement and communication, as described in the developmental-structuralist framework (Greenspan, 1992).

Learning new meanings and learning to play

The earliest "games" that adults play with infants involve movement, touch, singing and visual pursuit. It is to these early experiences, which may have once provided pleasure, that one returns to engage or reengage the child with minimal or intermittent relatedness. Encourage the parent to show you some of the things the child enjoys, and build on these. To do so, it is helpful to have certain materials available to interest the child which they can choose (by touching) or signal interest in (by looking), to which you might respond by using objects to show what they do. For example, you can diversify peek-a-boo games by hiding Koosh balls in pockets, under sleeves or pants, and on your head. These appealing sensory toys provide lots of contact points that are comfortably stimulating for most children. Similarly, few children will resist reaching into a small basket of cold, colorful marbles which provide pressure against their fingers as they move them about and listen to their sounds. Dumping these marbles can be even more fun, and if this is the only way a child uses them, then do it too, to join the child in what is pleasurable. It only takes a few trials before the child will begin to put the marbles back or will anticipate your holding another basket underneath to catch the marbles they are ready to dump. (Introduce the second basket fairly quickly so as not to spend a lot of time picking up spilled marbles.) When you return the next basket quickly to the child, she learns that you know what she enjoys and that you will help her have fun.

Many games can be built on this beginning: adding other small toys to the marbles basket, hiding objects in the marbles, dividing them, sorting them, feeding them to hungry sharks, etc. Use these games as part of the process of opening and closing circles of communication, so that a rhythm of interactions is established. This does not necessarily mean taking turns, but rather building anticipation, pauses, and a mutual understanding of what will happen next. It always means allowing the child to make the first move.

Remember to speak with lots of affect and animation and demonstrate as you work, providing verbal and gestural communication. But **do not necessarily tell the child what to do** directly. Instead, just make your move when the child is looking, and introduce a variation only after some engagement has been established. Then invite the child to do it too.

Find materials and toys that will be particularly appealing to the child with whom you are working and that are geared to his specific sensory processing abilities. Always choose materials that two people can play with interactively. Follow the child's lead in using any materials or games, rather than considering them as specific techniques to "apply" to the child.

Tactile toys which are very useful include Koosh balls, marbles, beans, baskets of little people, squishy little animals, silly putty, and magic wands. Also appealing are novel and attractive wind-up toys, which can be sent forth to challenge the child to see how they work, provide interesting sensations as they move or flap, and minimize pressure on the very defensive child to relate to you and the toy at the same time. Since you are the holder of these appealing toys, the child is likely to turn to you for another one. Keep materials at hand in quantity so that interactions can be repeated, the materials exchanged or traded. Just as a Koosh ball in a child's pocket is irresistible, sensations heighten the child's interaction and experience of himself and you.

No response from a child to your move might mean "no," or it might mean that the child is waiting to regain control of the situation at hand and will only pick a toy up after you put it down and back off a bit. Here, aim for eye contact and other gestures of acceptance. "Mistakes" can even turn into friendly and playful little tugs of war which mobilize motor tone and centering. Large slinkies and magic wands with floating bubbles or sparkles serve this purpose as well. Each of these cause-and-effect type toys is so responsive that the child creates an effect that you can identify as "purposeful" and join readily. Most important, always stay attuned to the child's responses and do not overwhelm her.

As you find ways to make a child's isolating behavior interactive, perseveration decreases and attention improves. For example, if a child is lining up toys repetitively, begin by handing him the next toy he typically picks. Just help him do whatever he usually does, verbalizing as you do so. Then try to put the toy down exactly where he would put it, as he places one and you place one. When the child is comfortable with this, try to put the toy down at the beginning or end of his line. Continue with these variations as long as it is possible to keep the child engaged. **The child's protest should be welcomed as much as her cooperativeness, for both are contingent affective responses.**

You can use a similar approach with songs, like the "ABC song" that seems to be a favorite of children with multisystem developmental disorders. If the child starts to sing the ABC, rather than sing with him (if this is even permitted!), sing the next sequence of letters. When this becomes acceptable, sing the **wrong** sequence of letters and see if the child shifts with you, or sing the letters backwards. You could do this with numbers, too, as well as familiar cue words such as, "1,2,3, GO!" Once a cue is established with pauses, anticipation and eye contact, then change the cues to something similar but also different, such as, "Ready, get set, go!" Or say something silly with the same intonation!

To help a child change and learn new things more readily, you yourself must avoid repetition. Too much structure and routine reinforce ritualistic tendencies rather than supporting new learning and tolerance for change and flexibility. Novelty, the unexpected, "curve balls," wrong answers to familiar questions, and playing dumb are all useful approaches as the child climbs the ladder of relatedness and increasing differentiation. Novelty becomes increasingly important as you begin to carry on "real" conversations with the child.

You can also give new meanings to old behaviors by treating these behaviors as signals for a response from you. If the child begins to turn round and round, take his hands or join him and sing a song. When the child begins to take objects and just drop them on the floor, find a small basket and catch the toys. By doing so, you **turn what looks like a random behavior into an intentional act that gets a specific response** from you. Your action builds the child's awareness of what he is doing as he hears the toys fall into the basket. This encourages the child to pause, if only out of surprise that he is not being told to stop. Then, not only will the child be aware of what you are doing, but he may start dropping the toys out of your reach!

If the child is pacing and flapping, hand him a bubbly wand or musical instrument, take one for yourself, and march in front of him, facing him, singing a song he knows. Do not confuse or get distracted by the child's excitement and atypical motor patterns. Try to interact with them, imitate them, give them new meanings if possible, but otherwise let them be. If the child lies down on the floor or couch, dim the lights, provide a small pillow and blanket, and sing "Twinkle" or another lullaby. When she gets up, say "Good morning!" If the child wants to leave the room, do not try to stop him necessarily, but indicate you must turn off the light before leaving, or knock on the door to see if someone is on the other side. Door play is the precursor to symbolic play and has different meanings for children at different levels. If the child bangs his head on the floor, provide a pillow to make it softer and be comforting and empathic with the anger.

Children will at first be surprised by these unexpected but related responses. They may reject your gesture, even

Opening the Door to Ben's World

Ben liked to line up his cars in a perfectly straight row. He did this for so long and so often that just the sight of Ben and his cars made his distressed parents pull away. Yet all attempts to distract him, to invite him to use the cars to "go somewhere," to put toy people in the cars, or to offer other, more interesting toys failed. In treatment, Ben's parents were counselled that rather than expect Ben to change in response to **their** ideas or wishes, they should simply join him in **his** behavior. They should, in fact, help him do what he wanted to do—which was to line up all his toy cars in the particular order in which he wanted them. Having seen this behavior so often before, Ben's parents could predict which car would follow which in the line. By joining Ben, instead of trying to interrupt, distract, or take away something which was of interest and purpose to him, they demonstrated their willingness to relate to him and to respect his interests and what was meaningful to him.

At first, Ben's mother would simply watch and observe, trying with gestures and words to resonate with his facial expressions and gestures. Ben learned to accept his parents' interest, probably somewhat surprised by the change in their approach. Next, mother would offer Ben the car she thought he would want next and help him put it in place, with Ben beginning to accept the cars, although he would not look at her or acknowledge that he had taken the car from his mother. Soon Ben was expecting his mother to have the cars ready for him; he waited for her to hand him the next car. Before long, Ben even allowed his mother to put the car down, exactly where he wanted it, after which he would put the next car down. In this way, around the toy cars, Ben and his mother slowly began two-way communication at a gestural level. (In fact, they had already begun to "open and close circles of communication" earlier, when Ben began to indicate with fleeting facial gestures that he knew his mother would be handing him a car, which he would then put down.)

As Ben's mother continued to "play" with Ben and his cars, he allowed her into his world. Soon, he even let her put a car down where she wanted to. At first he protested and fussed, actually yelling, "No!" Clearly, Ben could speak quite a few words when he was angry enough. When this happened, mother would indicate with clear motor gestures and with words, "Oh, Ben, you don't want me to put the car there. Oh well, I'd better put it here (clearly pointing to the spot and using animated facial expression) where you always want to have it." Thus, as Ben's mother demonstrated her empathy by showing him that she understood what had meaning to him, and by offering him interactive opportunities, Ben himself became more engaged and interactive.

Soon Ben's mother began to give him the "wrong" car or put a car in the "wrong" place. By "playing dumb," she confronted Ben with a problem to solve. This challenge would require him to open and close more circles of communication as part of the "negotiation." The process of meeting Ben at his own developmental level, in the context of his individual differences, enabled mother to expand the process and level of interaction. For his part, Ben could now deal more directly with his mother and her actions. As Ben's mother matched her intentions to his more accurately, and as Ben was able to engage in more reciprocal interactions, mother could move on to mediating meaning for symbolic play. Before long, Ben was putting toy people in his cars and pretending that they were going places.

As Ben's mother mediated the meaning of his gestures, she made him increasingly aware of his own behavior. By treating his behavior as intentional, she conveyed that Ben's actions had communicative intent, to which she could respond on a symbolic level. For example, when Ben collapsed on the floor, she dimmed the lights, gave him a blanket, and whispered, "Sh, sh, Ben is going to sleep!" When he knocked a doll or teddy bear on the floor, she quickly went to see if the toy was "hurt" and offered it a kiss. When Ben threw something in anger, she again treated the event symbolically and told the object "not to get in Ben's way," using strong gestures and tones to convey that she knew what Ben wanted or felt. This approach gave meaning to behavior and opened the symbolic door for Ben so that he could move on to the next developmental level.

The increased engagement, shared attention, and two-way-communication that developed between Ben and his mother provided the foundations for new cognitive as well as emotional learning. Interaction with facial expressions, tone of voice, and other gestures, with and without language, began to signal important emotional and cognitive functions. Further support for Ben through treatment of motor, tactile, and auditory processes by occupational and speech/language therapists expanded Ben's capacity to take in more experience. These interventions also offered Ben's parents specific recommendations to enhance their interactions at home. For example, therapists suggested that Ben's parents let him swing as much as he wanted to. This activity provided support for his vestibular system and for the development of his motor tone. It also provided ample opportunity for face-to-face interactions, visual tracking, and general gesture and verbal signalling for "more" or "to go."

An interactive and pleasurable relationship developed between Ben and his parents. They used "floor time" play (Greenspan, 1992) to follow Ben's lead, focus on cause and effect in relationships, provide cues rather than directions, and promote symbolic and representational thinking. Working with him at his developmental level and in the context of his individual differences, Ben's parents provided him with many opportunities for growth. Ben began to discover more meaning in the world. His parents continued to follow his lead and could now also arouse his curiosity and pleasure in new experiences. Ben responded more and more reciprocally to their intentions. It soon became evident that he was a bright little boy. This observation was confirmed several months later during cognitive testing; by this time Ben had become sufficiently interactive and attentive to respond to structured tasks. Ben's symbolic play and language improved as he continued to make emotional and cognitive gains.

get very angry for a moment (to which it is important to respond with empathy, "Oh, you did not want me to do that; I'm so sorry!"), but will more often than not stop the behavior as well. Children learn your meaning very quickly because it "interferes" with something which has so much meaning to them and has such a direct impact. They actually even enjoy some of these new meanings, especially those which are familiar and part of their lives such as bedtime and doors.

Toward symbolic functioning

New meanings open the door to symbolic functioning. This is one of the most important and most challenging tasks in our therapeutic work because without symbolic and representational abilities, children lack access to the world of reality, communication and logical thinking. Before trying to enter the symbolic world with children with multisystem developmental disorders, you must be sure that the basic processes of mutual attention and engagement are well established.

A positive affective connection with some level of comfortable interaction with the child must be underway. You must also consider the developmental level and basic interests of each child.

Adding imagery to action is an approach that is useful for all children and comes naturally to most, but must be learned by children with multisystem developmental disorders. Even the child who only enjoys tickling, can be approached by the "tickle bug" rather than your fingers. Or the child who has climbed up the slide or an improvised pile of cushions, is now on top of the "mountain" ready to "ski" down. Singing (music gets through more readily) focuses the child's attention on new meanings, so you sing "Sam is up on the mountain, Sam is up on the mountain" to the tune of "For he's a jolly good fellow." Similarly, a large moveable flexible plastic mirror, placed on the floor, becomes a pool to jump and swim in, or an ice skating rink, or waves and the wind when it is moved back and forth. Even the presymbolic child recognizes some of these favorite activities and enjoys the movement. The symbolic child can venture into the world of "sharks" and "whales" and "alligators" as she begins to symbolize aggression.

Introducing a large doll figure to act for you encourages further symbolic meanings. "Buddy" (a large boy doll) can become a symbolic playmate, is less threatening than other children for the moment, and can always be blamed for making the wrong move while you support the child's wishes. As the child becomes more symbolic, Buddy becomes a good companion for pretend meals, haircuts and doctor visits. Early symbolic play will organize around children's real life experiences. Have pretend food, birthday cakes with candles cooking utensils, doctor kits, tool kits, and other "real life" toys available. All the traditional symbolic toys such as garages houses, animals, swimming pools, building blocks, playgrounds, and swords should be available for free play.

Children also need more real life experiences to symbolize! Although it happens unintentionally, the child with complex developmental difficulties is often deprived of experience beyond the few things and places they feel safe with. Encourage venturing out to the world of fire stations, airports, trains, pools, pet farms, carousels and other such settings that all children enjoy. Then bring these experiences back to the playroom as the impetus for symbolic representation. After a real trip, you can follow up with, "Oh, I see an airplane, let's take a trip!" It is helpful to identify symbolic people as the people in the child's real life and have them participate in these early symbolic moves.

As part of their real life experience, children with multisystem developmental disorders should be with communicative, interacting children who can model and stimulate the behavior we want children with MSD to learn. Although interaction with other children may require the mediation of an adult, children do learn from other children if they are not too stressed or pressured to interact before they feel comfortable and accepted. When children with multisystem developmental disorders are in part-day early intervention or special education programs which are not integrated or inclusive, then every effort should be made to enroll them for other parts of the day in a nursery school or child care center for typically developing children (with an aide if necessary), or other organized group activities like music or movement/gymnastics classes. To learn in the real world, children must be allowed into the real world. Doors must be opened.

Another avenue to the symbolic world for children who have memorized beloved "scripts" is acting out these scripts with symbolic toys. Because these scripts have such special and familiar meanings to the child, they can become the stage for symbolic play. At first only the fragmented segments the child has remembered will get enacted, but once the process starts, new actions can get symbolized and scripts can be elaborated changed, using some of the same approaches described above. The purpose of this approach is not to reinforce the child's perseveration but to build on something she loves dearly in a new and temporary way. (Meanwhile try to introduce the child to new books and new tapes, by taking trips to video stores and libraries where exchange is natural, rather than buying books and tapes which can themselves become objects to struggle over.)

Even as the child's symbolic world begins to open, the old world is more familiar. Expect the child to vacillate until she experiences the new as safe, meaningful, and enjoyable. What matters most is to follow the lead of the child; maintain the first core processes of mutual attention, engagement, interaction and two-way communication; and proceed with building the child's symbolic and representational world. Throughout this process, as it occurs in play or the interactions of daily living, promote self-regulation of all behaviors, from the child's initiating to concluding. When your insistence on interaction, even in the most supportive ways, overwhelms or angers the child, he will usually move away, go to the other side of the room or turn his back reflecting organized avoidance.

Sometimes a child will become more distressed, either trying to assert herself and protesting by hitting or kicking as in the midst of a tantrum, or becoming reduced to total helplessness. At such times it is best to step back out of the way so that the child cannot hurt you, but not do not abandon or isolate the child. Encourage her to calm down, and if this is too arousing, stay quietly by her until she begins to reorganize. During play, attempt to read the child's signals of distress early on and respect them, only setting limits on destructiveness, and allowing time for transitions, such as getting ready to leave.

Related therapies

Sensory processing disorders contribute so significantly to children's difficulties in relating, communicating and thinking that they benefit from their own treatment with experts in sensory integration, visual and auditory processing and augmentative communication. The child's sensory needs, as atypical as they may be, are profound and essential to the child's experience of himself. Children meet these needs in the only ways they know or are driven to discover. These are seldom efficient and often maladaptive. For example, as children "push away" the sensory experiences that threaten to overwhelm them—sound, touch, visual stimulation—they ward off and avoid the voices, hugs, and animated facial expressions that are the essence of loving human relationships. Thus the child's **relationship** disturbance is secondary to—is a consequence of—the child's sensory reactivity, processing, and motor dysfunctions.

The very symptoms which the child presents are the keys to treatment. Children with the behavioral patterns described above present massive defenses to the world, which limit their experience, but they can be approached. First, however, one must organize observations of the child in order to understand his specific sensory reactivity and the developmental lines or tasks that have been affected.

Sensory integration therapies work to normalize children's sensory systems. An occupational therapist will provide far more efficient ways to treat low motor tone, underreactive vestibular systems, tactile defensiveness and other related sensory processing difficulties than the perseverative attempts children make on their own. The speech/language therapist will use sensory integration approaches, and treat oral-motor difficulties to encourage vocalization and increase the range of eating. Augmentative communication will support verbal communication and helps with more specific retrieval and expressive difficulties at later points. These therapists also develop home programs, so that parents can implement their techniques day in and day out, just as classroom teachers must do.

Therapists offer very important relationships, which support the emerging relatedness of the child and help him differentiate expectations and feeling tones associated with each person. These are often the first significant relationships that the child has outside the family. Integrated treatment efforts work best where therapists and parents regularly share their joint impressions of the child's emerging abilities, examine the interaction of their different efforts, which are unique for each child, and consider the impact they are having on the child's real life at home, in school and in the bigger world. Parents and therapists share their understanding, solve problems, and plan the objectives of the next stage of treatment, each knowing what the other is doing.

All therapists working with children need to become integrated professionals, understanding the principles and processes of each form of treatment and supporting each other. Given the severity and risks of multisystem developmental disorders, these children should be treated by the most skilled therapists in each field working together. Transdisciplinary models may not be as effective but are sometimes used when there are insufficient resources. It is our observation that for children with multisystem developmental disorders, more intervention is better than less during the critical early years, and that multiple approaches increase the possibilities for growth.

Do not underestimate

People consistently underestimate the abilities of children with severe regulatory and multisystem developmental disorders. Although such children certainly seem to know what they want to do, and know how to get their parents to meet their needs, we sometimes relate to them as if they do not understand what is going on in the world. Not **responding** (for example, to the questions and tasks posed by an unfamiliar examiner) is different from **not knowing**. Children who use many of their senses peripherally, (that is, who won't look at you but see what you are doing if it pertains to them) are not able to communicate what they know directly. They also tend to listen selectively for offers of things they would like to have (which elicit a quick response), although other listening is marginal and inefficient. Poor processing and regulatory capacities affect early life experiences from the start, which makes it difficult to develop the full range of emotional and cognitive abilities.

There is no reason to believe that children with regulatory and multisystem developmental disorders who have no other known explanation for their difficulties lack the potential to learn or experience less than others. It is important to create every opportunity, through early and intensive treatment approaches, for them to fulfill their potential. The methods described in this article suggest some of the ways to begin opening the door to engage and relate to these children. These methods must be used in the context of developing therapeutic relationships with the child and family which will support each child's development across all domains of learning.

Work with children traditionally diagnosed within the autistic spectrum and pervasive developmental disorders is a wonderful opportunity to unravel the mysterious web of defenses and roadblocks on every sensory and emotional front. It requires energy, problem solving, and sensitive attunement to every aspect of the child's experience and communication. It requires a willingness to enter the child's world and draw her into a more interactive experience so that potential can be realized more fully. It requires professionals joining parents to discover ways to help children learn, and to become part of the human world. The rewards are quite remarkable!

References

Greenspan, SI. 1992. *Infancy and Early Childhood: The Practice of Clinical Assessment and Intervention with Emotional and Developmental Challenges*. Madison, CT: International Universities Press.

Simon: Intensive, Multi-faceted Therapy with a Developmentally Delayed Little Boy*

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Author's note:

The following case report has been written with the hope of exemplifying key considerations in the assessment and intervention of young children with so-called pervasive developmental delays or disorders. Although the child described here was over five years old when this was written, his developmental problems had begun much earlier. Further, the strategies I used to work with him rest on knowledge and experience with normally developing infants, toddlers, and their families.

What follows here is but one version of reality; I regret that space limits could not permit Simon's story to be told from the perspectives of the other interventionists, as well, because I believe that his progress has rested on each of the therapies and on his parent's lively participation. I am deeply grateful for the excellent collaboration with my co-workers, with Simon's family, and with consultant Stanley Greenspan, and acknowledge with abiding appreciation how much I have learned in this process.

I have of course changed the names and other identifying details of Simon and his family. Also for the sake of confidentiality, several sections of this article include composite descriptions, based on work with more than one child. But because, in a relatively current case report of this length and nuance it would be impossible to disguise the material to the point where virtually no one could recognize it, after some weighty reflection about case considerations and ethics, I decided to show a draft of this article to Simon's parents. They have made minor changes and each independently expressed the hope that this story of their family will be of assistance to others.

At age 3.3 Simon was an adorable, slender, white-blonde little boy with almost no language, and an obsession with hinges and the movement of doors. Simon said a few words and would fill in an approximation of the words of some songs when a familiar person, like his mother, sang the song, pausing at key intervals. He did not, however, respond to his name or to any other words or sounds, except to choose among a few familiar foods. Most language appeared to wash right past him. While Simon rarely interacted with his older brother, he seemed to know and want his key caregivers nearby. Yet they felt that his developmental progress, which had seemed normal earlier, had virtually halted well over a year before. They were increasingly unable to go places with him, since he would investigate every door he encountered for 15 minutes to half an hour.

A psychological report, written as part of an interdisciplinary assessment at a major hospital evaluation unit when Simon had just turned three, described Simon as an

> ***active boy who is functioning in the 24-29 month (mental) age range ... His strengths were in his ability to accurately solve puzzle type tasks ... and in his gross motor skills. His weaknesses were in his inability to process information due to the severe delay in both his expressive and receptive language and in his inability to engage in meaningful problem solving tasks which required following simple commands ... His attention span is short ... (he had) a noticeable lack of interaction with anyone (besides family).***

The psychiatric diagnosis that Simon received at that center was, "expressive and receptive language delay; rule out pervasive developmental disorder." The commonly accepted experience in the field is that such a child might be expected to lose ground in relation to the growth of age-mates and, at best, could be hoped to make modest gains over a several-year period.

Simon was referred to my private practice by a park-bench acquaintance of his mother's, a special education teacher who had heard that I had begun to work with similar children. I met with Simon's parents for two long information-gathering sessions in which I elicited their story with a deep sense of sympathy and respect. These pleasant, warm, devoted parents had tried everything they could think of to help their young son; they seemed frustrated, concerned and very sad, but not really depressed yet. They knew that I felt that we needed a few hours together to decide if we all felt we could work together. I also asked their permission to make an observational home visit. Although they admitted some discomfort about having a professional watch them at home, they were also relieved that someone wanted to see Simon where he was most relaxed. We planned a time when both parents and Simon's normally developing nine-year-old brother would be home.

Following the home visit, the parents and I met in my office, where we exchanged impressions of the visit. I could match what I thought I had seen with their knowledge of their son's typical behavior. When I told them that, along with a comprehensive array of interventions, I believed that I could be helpful, they were eager to begin. Given that they recognized the importance of early intervention; that they had doubted the techniques of assessment and the sufficiency of the recommendations made to them earlier; and that, somehow, they had confidence in their little boy, they devoted themselves to carrying through the details.

The treatment plan

A comprehensive, intensive package of therapies for Simon was gradually phased in over about seven months.

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*An earlier version of this paper was presented to The Vulnerable Child Discussion Group of The American Psychoanalytic Association, Spring Meetings in Washington, D.C. on 30 April, 1992.

We began with parent/child sessions four times a week and parent sessions once and sometimes twice weekly with me. Next we added relationship-based communication/language therapy two times weekly and then twice-weekly occupational therapy, which emphasized sensory processing and sensory integration. Several months later we placed Simon in a small nursery school with somewhat younger, normally developing children. A special teacher was selected by the family, the school's director and me (based on personal qualities evidenced in references, interviews, and, most important, observation of her playing with Simon at home) to help Simon negotiate the preschool environment without retreating to repetitive activities and to gradually assist him in making contact with other children. Simon's family also implemented an elimination diet; that is, they removed certain food groups from Simon's diet in order for us to observe whether or not that assisted in "slowing him down" (for details, see Greenspan, 1992, chapter 8). The entire team, including nursery teachers, has met every seven to ten weeks in order to understand Simon's rapidly changing needs and to cross-fertilize treatment approaches.

In this case, the parents joined many team meetings. With other families, parents rarely attend team meetings, communicating instead with each specialist, as well as with the team leader. Both approaches can work productively, as long as the plan is flexible, the family feels comfortable with it, and the team sometimes meets alone. Meeting alone on occasion is important so that team members can develop confidence in one another, share concerns and insecurities, work through differences, teach each other, and consider approaches to work with the family.

Simon's intensive treatment was costly and required enormous effort by his family to coordinate. Their private insurance covered only a fraction of expenses. Moreover, the family lost income because Simon's mother decided to forego returning to her job so that she could participate in and coordinate her son's treatment. Having worked in and close to therapeutic and typical preschool and school settings during the entire course of my career, I am confident that the approaches described here could *more easily* be implemented and, in fact, *belong* in community-based early intervention and family support settings that offer services for children like Simon and their parents in an integrated manner, and at less financial and energy costs to families and the community.

Notes from Simon's first office visit - age 3.3

> ***Simon and his mom almost burst into the office. He immediately went to the toy telephone, picked it up for a moment and dialed, put it down and by this time I talked about taking his jacket off which he permitted his mother to do. Simon seemed to have no appreciation for the limits of my office and was fascinated with the mirrored French doors (I work in the front room of a brownstone) and he kept returning to them on and off during the entire session . . . opening and closing.***
>
> ***(Besides his interest in) . . . the French doors, Simon opened and closed the inner front door several times and tried the locks to the outer door. Perhaps most striking was a driven but somehow aimless quality which sent Simon first to one thing, then to another. The only thing he lingered at and repeated was door "play". About halfway through the session he noticed the stairs just outside my office door, went to the top, looked in the bathroom, opened and closed its door, noticed the closet door, opened it slightly, seemed disinterested in the contents and resisted my effort to let him know that the closet was off limits. He was clearly more drawn to the doors and the stairs than anything else, including toys and including me. Simon's range of affect stays mostly the same, pleasant-neutral, and he made almost no eye contact with me and very rarely with his mother.***

No sooner was the session over than I called my landlord to ask for keys so that I could lock every door in my house!

Initial assessment

Simon was basically engaged with his family. Yet his visual and auditory processing difficulties resulted in his warding off visual exchange and cuing even from them through his driven, yet basically aimless, often repetitive behavior. Simon's own sensory and processing systems sent him signals he could not organize. His environment—which included his family's enthusiastic Texan energy, volubility, and social schedule—tended to overwhelm him as well. In a youngster whose eyes, ears, touch, vestibular, proprioceptive and processing systems bombard, whisper and confuse, behavioral organization and regulation tends to become stereotyped, while shared attention and engagement are compromised (Greenspan, 1992). Simon retreated to his absorption with doors and hinges.

When I met him, Simon was unable to generalize his fragile capacity for shared attention and engagement with anyone who was not very familiar. On the other hand, in terms of the continuum of multisystem developmental delays which Greenspan describes in this issue, it was encouraging to note that Simon appeared to have positive expectations of the people he knew. He could share eye contact, however briefly and unreliably, more readily with them than with strangers. Reciprocal games, such as turn-taking songs, also brought pleasure, contact, and some routinized two-way communication with family members. Simon was extremely limited, however, when novelty was introduced. Also, he was more shallow, repetitive, and driven in his repertoire outside of his home.

The reader may recall that the psychological report noted, but minimized, Simon's basic capacity for engagement when it described "a noticeable lack of interaction with anyone (besides family)". The expectation that a young child interact at his best capacity with a stranger who asks him to focus on unfamiliar tasks makes little sense; systematic observation of the child with his familiar caregivers—preferably at home—is more likely to yield glimpses of his best capabilities. And it is these glimpses of **highest** current functioning which provide not only **guidance** about where to aim as we begin to intervene, but also **hope** that, with help, the child may find his way to generalizing that capacity, even as he builds new fledgling capacities to generalize.

It is also essential to recognize that while Simon had previously been evaluated at two major clinics, in neither workup were the findings of the varied professionals integrated beyond a recommendation for placement in a therapeutic nursery school; nor was an evaluation of his sensory systems recommended. Given that Simon's gross motor and motor planning skills were excellent, and that his fine motor capacity was competent, his sensory integration deficits were apparently not suspected. Yet the occupational therapist we engaged found that Simon was not only highly responsive to environmental stimuli but also lacked effective processing and integration capacities. The result was poor self-organization. Simon was hyper-reactive to tactile, auditory, and visual stimuli, recoiling, for example, from the volume and intonation of speech or the touch of soft substances such as playdough or squishy balls. Compounding these profound challenges, Simon suffered from encumbered abilities to process and sequence auditory input and from difficulties in sequencing and producing language.

In order to highlight the distance which Simon has covered in just over two years, using the approaches to be described later in this paper, some detail about his recent functioning is included at this point in the narrative.

Current functioning

Simon is by now a loving, joyful, animated and eager youngster who can be mildly provocative, come up with some ideas, and make jokes. He speaks in full sentences and utilizes play, but he continues to be somewhat self-centered and concrete, focusing on the familiar. Perhaps partly in response to his family's pleasant, friendly style, and the muted quality of expression of any sad, angry and anxious affects by family members, Simon is disinclined to express negative emotions—except when they overwhelm him. He resists integrating affect into play.

Still, I discern incipient internalized conflicts emerging, a healthy developmental sign. The very recent sheep, cow and lamb game described next seems to be a foray into combining the representational with the emotional, a move which, if Simon makes it, will bring him more solidly into symbolic capacities.

Notes from a recent session - age 5.4

> *Simon enthusiastically suggested that we play "sheep," a game that he and his mother had started at home. I agreed to play, but as a "cow" (since it is still essential to face Simon with the volition and separateness of others). He accommodated me and, as a sheep, set himself and his Mom—whom he designated "lamb"—up in their barn, and directed me: "You go to your house. I'll go to my house, and then I'll come visit you." Simon crawled over to me and after a bit said, "Baab—Now we're going to sleep," as he crawled back to his barn.*

Simon ends up in his parents' room almost every night, and I felt he was ready to address this issue in our play:

> *I protested that I didn't want to sleep alone, to which he responded, "Come over here and sleep with me and I will take care of you." After a while there, I suggested to his mom, "How about telling me that I have to go back to my barn?" She played along, to which I responded, "Moo, moo, I'm sad. I have to go back to my barn. I will be so lonely." Simon started to really giggle, so I knew he was getting it, recognizing my position, and relieved that it wasn't his. He asked his mom sympathetically, "Maybe she could stay here?", but she was strict, so I lumbered off to my barn, protesting all the way.*
>
> *. . . Simon also announced twice at appropriate times in the session that he would be missing his appointment on Friday because he was going on a vacation. His eyes and face conveyed both regret at having to miss times with me but also pleasure at the trip he was anticipating.*

The reader can see Simon's emerging capacities in forming and differentiating represented experiences. Expressive language is relatively strong, and relatedness is solid, while affective richness and subtlety are commonly available over positive themes and not infrequently over anger and jealousy, much more rarely over sadness, anxiety, and fear.

Recent psychological evaluation

A new psychological evaluation, done by an examiner previously unknown to Simon as we engaged in school planning, documents Simon's growth at five years of age:

> *This attractive, charming lad currently demonstrates a solidly average level of intellectual, cognitive achievement . . . his ultimate potential is (probably) somewhat greater . . . In spite of his articulation problem, Simon makes himself easily understood through syntactically accurate and coherent conversation. He has good (1) word knowledge, (2) expressive abilities (3) visual-analytic and organizational ability, (4) mathematical and reading readiness, (5) capacity for abstract thinking and (6) fund of general knowledge. His cognitive skills, his readiness and eagerness to absorb information like a sponge, and to participate with others have been marching out ahead of the maturation of his internal representations of feelings and relationships between himself and his world.*

How did we help Simon get to this point?

Early work with Simon's family

Simon's parents came to me because they were stuck in their efforts to help their dearly loved son grow. It was my assessment that they were caught mostly because Simon's range was so stereotyped and repetitive. This view was confirmed as, during the first several months of intensive treatment, they readily modified old, unproductive patterns when we explored and generated new, more workable ways of handling Simon. Their perceptions of their child also shifted during the early months. They were relieved as they came to recognize his sensory difficulties and imagine them as a faulty filtering system. Knowing about something which has previously been "invisible" localizes and delimits worry and also guilt. Using the growing number of examples we were experiencing together in parent-child sessions, I could help Simon's parents become increasingly familiar with the contours of his hyper- and hypo-sensitivities.

It was crucial to help these parents have hope. It was important for them to know that, in the hands of an occupational therapist experienced in sensory processing areas, extraordinary sensory difficulties often either neutralize entirely or become manageable. I also emphasized that Simon's idiosyncratic sensory gateways had made it impossible for him to experience his environment as tolerable. In this struggle to cope, he was unable either to convey or elicit what he needed from them, as usually happens naturally between normally developing babies and toddlers and their "good-enough" parents. This authentic explanation for what had gone awry, offered responsively at key points in the search through their own feelings and behavior patterns vis a vis Simon, helped them to empathize with him (see Kalmanson, this issue). It eased their guilt and warded off any incipient depression.

Since Simon's family is, of course, more central to his well being than any professional member of the team, the goal of treatment was to get **their** relationships contingent again and working as a central force to pull Simon's development along. Like the members of the team, family members are collaborators who add information, ideas and perspective as they themselves come to a greater understanding of and capacity to be responsive to their child's unique and changing needs. So, when I noticed an approach, through either their contact with Simon or mine, that I felt would be helpful, I conveyed that information directly and supportively, sometimes by demonstration, sometimes by reviewing and emphasizing something that had just occurred. They did the same with me. It is worth noting that this collaborative approach seemed to evoke a sense of helpfulness in Simon's brother, as well, making him a part of the growth-promoting total environment we tried to achieve for Simon.

Especially in the early months, I was always deeply aware of **searching** for ways to make and continue contact with Simon. I tried to offer that mindset to his family as model, for I believed that they were similarly able to make discoveries about how to elicit his attention and connection. Each of us had our expertise—mine came from my training, experience, and upbeat dedication to connecting with Simon. Theirs came from deep family bonds, twenty-four hour a day, first-hand familiarity with detail, and devotion desperation to help Simon get better. So we became comrades on Simon's behalf, observing and coaching each other about the always significant details. And we would continue as partners for a while, until I would discern some fledgling bid from Simon to take developments to a new plateau. Then I would again take the lead in helping his parents decipher not only his new possibilities but also their potential range of effective responses.

It was important for me to take the lead and actively direct the team from time to time, because there is something about the proclivity to repetition, the tendency to pay more attention to their own ideas than to those of others (see Greenspan, this issue), and perhaps most salient, the extremely weak signaling power of children like Simon (see also Ghuman, this issue) that has the effect of promoting delimited, repetitive patterns from normally responsive adults. I constantly had to draw on my store of experience with earliest development to discern and then support Simon's fragile forays to next developmental steps. And we adults all often needed to become bolder and clearer in helping Simon to recognize and respond to our different-from-his communications.

What has become a relatively coherent story of treatment as I write this case report hardly felt that way as I was doing it. This was especially true in the first year, when the interactions related with some order here all too often seemed like isolated, seemingly unconnected fragments. My experience as a therapist is in part akin to that of detective (who often is not confident that she can find the way this time)—a detective whose goal it is to connect, not convict.

FLORENCE SHARP

I sometimes feel that a crucial part of this kind of treatment is the patient's dawning sense of the therapist's deep dedication to discover a way to partner him.

Sessions with Simon

Simon's mother, father, or au pair (and occasionally his brother or aunt) have been present for all or part of each treatment session. His family members have been centrally involved in every session they brought him to, with each of us taking turns observing the other interact with Simon, or as time passed, with the three of us playing together. The au pair was involved sufficiently to help him learn effective ways to interact with Simon, but I used those sessions, once or twice a week, to which Simon was escorted by the au pair to interact more exclusively with Simon, to promote my own salience for him. Interestingly, Simon seemed also to have sought this balance himself.

My aim in this section is to describe my dawning and direct experience with Simon. The intensive parent-child interactive work with his parents is therefore de-emphasized.

As my notes from the first session make clear, Simon was initially unaware of physical (or personal) boundaries. He seemed compelled to investigate any door available, hence my decision to lock any doors we didn't need to go through. Simon was similarly unable to recognize the play potential of toys. He showed virtually no interest in my assorted playthings; even the bongo drum and rocking chair did not elicit his attention. Since there was nothing to hold him in the office, I determined to join both his physical pace and his propensities with the hope that I could woo him, and gradually organize his apparent interests (or, more aptly, his **tolerances**) into turn-taking and greater eye contact. Indeed, eye contact seemed fundamental, and in the early days my goal was simply to catch Simon's eyes and hold them with mine for a second, and then two.

In that early phase, I often gently imitated Simon, particularly using the mirrors of the French doors. Sometimes I succeeded in gleaning his notice. I also demarked the treatment area as including my office, the waiting room, the staircase, and the bathroom at the top of the stairs. I was reliably clear that Simon could not go beyond these bounds, and in most directions there were doors that did not open. Simon soon lost interest in pursuing them.

So, I imitated Simon; I placed myself in his line of vision; I watched his reactions and initiated my own; I followed him about, joining, expanding, slowing him down with interactiveness, occasionally making physical contact or intruding myself in his path as seemed possible. I carefully watched his reactions. I built, as I could, on the things he seemed drawn to, like the staircase. The simplified language I used followed and supplemented our activities.

Here are some session notes about five weeks into treatment, approximately session twenty:

> ***Simon seems to love the jumping down the stairs game. He goes up the stairs and makes sounds approximating "Good jump, good jump," waiting at the top and sticking out his hand towards the banister.***

I had by then discovered that I could make eye contact most easily by standing about 4½ feet from Simon. His hand held out expectantly in the direction of the banister would be my cue to say something like, "Hold on to the banister now!".

I was careful never to repeat phrases exactly and to continually vary the game to the degree that I thought Simon could bear. It was important to give gestural cues to my intentions. I would wait and move to catch his eyes, he would smile, I would smile back, with eyes joyously wide, to extend the moment as long as we could. Then he would jump down the stairs, one at a time. Then it would be my turn, and I would jump down the stairs toward him, again and always extending and broadening the moments of connection. I took great care to remain contiguous, to promote eye contact, turn-taking and variation. It is no accident that my affective engagement with Simon was won through joining his motor activity (see also Ghuman, this issue). Occupational therapists reading this may think about the benefits of joint compression inherent in jumping.

The challenge for the adults was to stay in synchrony with Simon without falling into boredom or a routine of doing anything exactly the same way. The challenge was to have Simon open and close circles of communication, and for him to become responsive to the communications of the other. Can you see how, already, Simon was less fragmented and aimless in his behavior? Relative to the first contact, a sense of greater intentionality, interactiveness, spontaneity, and organization was evident in the brief jumping sequences.

The fundamental issue which we were tackling was the shared attention, and expressive and gestural turn-taking, normally so prominent in the last three quarters of the first year of life. Simon was both far too active, too tactilely defensive, and too old to be the in-arms baby doing a dance of gestural and cross-modal communication (Stern, 1977). What you are reading about is the dance which we discovered together, the dance he could increasingly permit, the dance unique to him which I came to enter, mirror, organize, expand, enjoy and share as his ally with the key caregivers in his life.

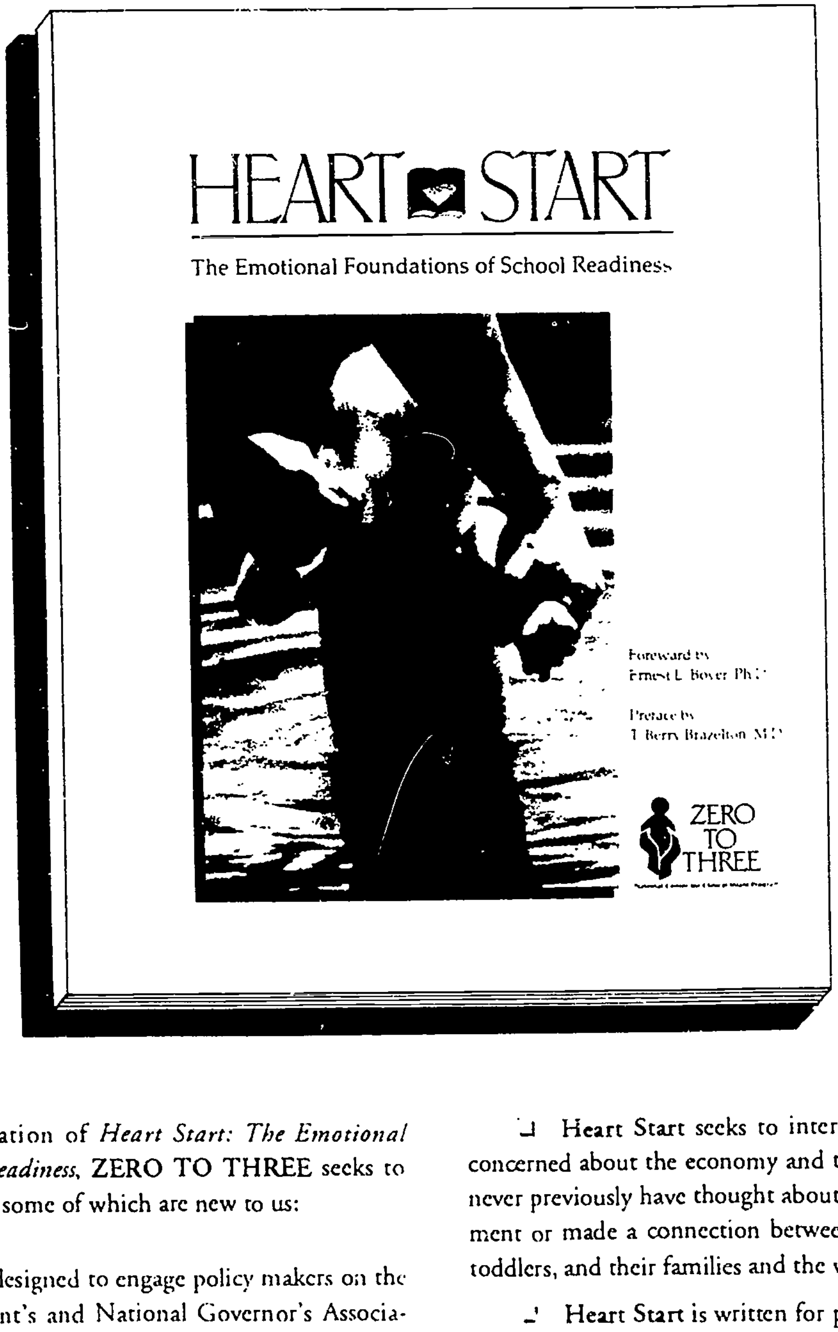
Although there was a great deal of thought given to my work with Simon, sessions themselves, like life, had to be improvised. One more vignette from later in this period illustrates how the jumping game became extended.

> ***As he marched up the stairs for yet another round of jumping, Simon approximated, "Up the stairs." Then he darted down, grabbed his juice box, put the pointy straw in his mouth, and whisked it up with him; he was excited and was moving even faster than usual. With anxious immediacy (but somehow managing, even under pressure, to use telegraphic, headline-type speech), I commanded sharply, "No jump with juice! Not safe!" By the time my words were out, Simon was already several steps up. Very carefully, he turned around, held the banister, walked down the stairs and responded with a smile, "Walk down."***

continued on page 31

ZERO TO THREE

announces



HEART START

The Emotional Foundations of School Readiness

Foreward by
Ernest L. Boyer Ph.D.

Preface by
T. Berry Brazelton M.D.

ZERO TO THREE

With the publication of *Heart Start: The Emotional Foundations of School Readiness*, ZERO TO THREE seeks to accomplish several tasks, some of which are new to us:

☐ Heart Start is designed to engage policy makers on the first goal of the President's and National Governor's Association's Education Summit: By the year 2,000 all children will arrive in school ready to learn.

☐ Heart Start seeks to interest citizens who are greatly concerned about the economy and the labor force but who may never previously have thought about infant and toddler development or made a connection between the well-being of infants, toddlers, and their families and the well-being of the economy.

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☐ **Heart Start** addresses child care for infants and toddlers, making specific recommendations about ratios, group size, and continuity of care, all factors that affect the quality of relationships among children, caregivers, and families.

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☐ Building on other discussions of school readiness, **Heart Start** shows *why* early experience is important—and *how* solid emotional development in the zero to three years aids intellectual progress at school age.

☐ **Heart Start** makes connections between children's earliest development and their ability to be part of America's future educated labor force, so necessary to the survival of the nation as we know it.

☐ **Heart Start** emphasizes the crucial importance of relationships between service providers and parents.

Drawing on findings from academic research and clinical practice, Heart Start offers recommendations to address the need of all young children for:

☐ health

☐ unhurried time with a limited number of caring adults

☐ responsive caregiving, and

☐ safe environments.

Some excerpts from Heart Start:

From the time they leave the places of their birth until they arrive in preschool or kindergarten, children are largely invisible to society. No one outside a child's family may recognize difficulties likely to impede learning until they become evident in school. But professionals in child development know that the sources of those difficulties develop long before school begins.

The fact is that success in school depends on characteristics largely formed by the age of three. And those characteristics are not a fund of factual knowledge, nor the ability to read or to recite the alphabet, nor familiarity with numbers or colors. They are the characteristics of children, of whatever background, who come to school curious, confident, conscious of what behavior is expected of them, comfortable in seeking assistance, and able to get along with others—qualities largely developed, or not developed, in the first three years of life. This holds true in good schools and poor schools, in large schools and small schools, in public schools and private schools.

Almost all students who do poorly in school lack some or all of those fundamental characteristics. No matter what potential they are born with, children who have little confidence that they can figure things out, who have not been encouraged to reach achievable goals, who lack the capacity to express feelings ideas and simple concepts, or who feel no responsibility to control their behavior (or are unable to control it) are poorly equipped to learn in school.

And there are many such children. In some states close to one out of five children are required to repeat first grade. Many of them, unable to respond to any but the most ideal teaching conditions, then fall further and further behind. Often they become more discouraged, more withdrawn, more resentful and, in some cases, more disruptive through each grade.

Does that mean that the quality of schooling doesn't matter, that the readiness of the student is everything? No. The quality of schooling matters greatly. Schools can make a difference. Our schools must take children as they find them and do their best for all. Moreover, even poorly prepared children can be helped by individualized attention from devoted and persistent teachers, especially if the children's families are also involved. But that kind of attention is often not available. And, in any event, in education as in medicine, preventing problems is far more effective than trying to cure them. All our children should arrive at school able to benefit from the classroom.

High-quality early childhood programs and good preschools can help children prepare for school. But preschools often face the same problem that schools do: they find themselves having to help 3- and 4-year olds overcome delayed development and alter self- defeating attitudes already deeply ingrained. When preschools succeed at those tasks they perform an immensely valuable service. But prevention is better still, and prevention must start earlier. It must start in the first weeks and months of life, because it is then that children first try to understand and master their environment, and find those efforts encouraged—or not; first attempt to concentrate and find it possible—or not; first conclude that the world is orderly and predictable—or not; first learn that others are basically supportive and caring—or not. It is in those years that the foundations for later learning are laid down. Or are not.

The task for parents and other caregivers is not to force development. Rather, it is to try to ensure that the practices of daily life give the infant and toddler the emotional security and encouragement—the "Heart Start"—that are the foundations for learning at home, in school and throughout later life.

It is within relationships that much of the baby's crucial learning will occur, and all babies are learning about the same things. They are all learning about their bodies, about objects, about who they are, how to feel about themselves, and what they can expect of those who care for them. Such basic human capacities as the ability to feel trusting, to experience intimacy with others and to negotiate with others begin to develop from their earliest moments.

> **This little boy is 8 months old. He has been sitting in a jump seat for several hours during the last of which he has slept. He awakens when the door slams and he hears a deep voice. Immediately he begins to bounce and crow. Every inch of him is excited. His father enters the room, puts down his lunch bucket and walks toward him. Now the baby nearly catapults himself out of his jump chair as his father smiles and reaches for him, saying, "And hello to you—big guy—come and give your old man a hug." The baby grips his father's shirt and reaches for his cheek and his father nuzzles the baby's hand with his mouth. The father asks if his son is ready to watch some of the ball game. The baby mirrors his father's happy feeling and responds with a chain of babbling. The father widens his eyes and listens, then asks his son's opinion of today's starting pitcher. The baby looks away—calming himself—the father waits and the baby turns back, locks eyes with his father and produces a long string of syllables, ending in a laugh. His father grins and says, "You may be right." The baby's mother asks the father if he'll change the baby's diaper. The father grimaces but agrees. Throughout the diaper change, the baby and his father continue a dialogue full of body movements, facial expressiveness and vocal exchanges.**

This baby anticipates the pleasure he will have with his father. He has already learned that most of the time his father feels very good with him and he feels very good with his father. He has also learned to have "conversations" with his father—to initiate, be intentional, take turns, listen and respond. He feels respected, understood. He likes himself.

> **This little boy is 8 months old. He has been sitting in a jump seat for several hours, during the last of which he has slept. He awakens when the door slams and he hears a deep voice. Awake, he wiggles restlessly and looks in the seat's tray for something to handle. Everything is on the floor. He makes a noise of frustration—not loud—just expressive of his feelings. He is not trying to communicate.**
>
> **The father comes in and tosses his coat over a chair. The baby grunts and brings his hand to his mouth. The father glances at him and then glances away. The mother calls to the father and says probably the baby needs changing. Would he change him while she finishes dinner?**
>
> **The father says, sarcastically, "Thanks a lot—is that a special present for me?" He disappears briefly and then suddenly the baby is abruptly lifted out of the seat from the rear. The baby is surprised but only stiffens and is quiet. "Ok stinko—let's clean up your load." The baby is placed on his back to be changed. He lies still—chewing on his hand. Once, he twists, extends his arm to grasp an object and lifts his leg. The father pulls him back flat, lightly slaps his thigh and says sharply, "Stay still—I'm almost done." The baby's eyes widen but he stays quiet—just chewing on his hand. The father finishes quickly and returns him to his jump chair.**

This baby is also learning. He is learning to be wary in what he communicates to his father. He has learned to be passive and to curb his curiosity. He has no sense that his father enjoys him. He feels neither understood nor confident. He has learned nothing about turn taking, or mood sharing, or dialogue with his father.

Over time, the very different qualities of these contrasting relationships will heavily influence the repertoire of behaviors that are characteristic of a particular child. Obviously, the child's own temperament also matters greatly. But the children in these different relationships will arrive at kindergarten with markedly differing capacities, feelings and expectations, and these will profoundly influence how they enter into the give and take of learning in school.

What needs to be done can be expressed quite simply. It is to create the conditions which will give all American children the opportunity to develop, in the first years of their lives, those characteristics—confidence, curiosity, persistence, a sense of responsibility, the capacity to understand the feelings of others and to cooperate with them—which are most important to their later success in school.

Young children have four kinds of needs. The first relates to the infant himself: it is simply good physical health. The second and third needs relate to him through his parents and other caregivers. One is time: sufficient time for caregiver and child together so that an intimate and supportive relationship can develop. The other is responsive caregiving: caregiving based on an understanding of how children develop, and how to encourage and respond to that development. Finally, both infant and caregiver need a safe and supportive environment.

Services that do exist to meet these needs are often now organized and managed in ways that are convenient for their providers, but daunting or inaccessible or demeaning to the intended beneficiaries. That is understandable, especially when providers are overstretched and in short supply. But the end results are often poor. Services that are difficult to reach, or impersonally provided, or poorly explained will often not be used. Or they may need to be offered repeatedly before they are accepted. That leaves providers spread thinner, recipients more discouraged, and society inclined to blame the victims.

Thus, something beyond the simple establishment of services or funding of programs is required. What is needed is a commitment to support parents across the board in their most important work. It is a determination to make services not only available but attractive, understandable and fully useful to the persons they are intended to help—to provide services in the context of continuing and respectful relationships between provider and parent, and in settings as familiar and convenient as possible.

The fundamental need is not for a collection of particular measures, but for a perspective. And it should be applied to all in this area—public and private. All policy initiatives—in addition to the other ways in which they must be assessed—should be viewed in terms of their effects on infants and toddlers. At all levels of government, and in private institutions as well, we should learn to ask ourselves: what are the consequences for infants and their families? Will this policy improve infant health? Will it give infants and toddlers more time, or less, with parents or other trusted caregivers? Will it tend to enlarge what parents and other caregivers understand about the needs of very young children, or not? Does it tend to confirm parents' importance in the lives of their children, or to diminish that importance? Can it be revised to serve its other purposes and still improve—or at least not worsen—the situation of the nation's youngest children? Does it accord with our nation's professed belief in the crucial importance of the family?

More about Heart Start

Heart Start has been published as three booklets and one insert.

The principal report, 46 pages in length, includes a foreword by Ernest Boyer, an introduction by T. Berry Brazelton, and chapters on "What Is at Stake," "The 'Heart Start'," and "What Is To Be Done?" This final chapter includes 38 specific recommendations for federal, state, local and corporate action to assure health, time for unhurried caring, promotion of responsive caregiving, safe and supportive environments, and special help for families with special problems. Endnotes include sources for both statistics and conceptual material.

An executive summary of the report includes the full list of recommendations.

A set of vignettes, *How Services Can Change the Lives of Infants, Toddlers, and Their Families,* illustrates the supportive impact on families with young children of a community health nurse, a physician specializing in sensory processing problems, services to foster parents, a community health center, and a child care center.

A one-page insert, *Recommendations Specific to Infant and Toddler Child Care,* suggests how the child care system can address all five core areas of infant/family needs.

Using Heart Start

ZERO TO THREE is already finding very strong interest in *Heart Start* among corporations, foundations, and policy makers and parents. By the time you read this we will have introduced the report to members of Congress, the press, and other national organizations concerned with social policy affecting children and families.

We also plan to initiate a self assessment process for interested communities in the form of "Heart Start Days." These events bring together local elected officials, corporate leaders, staff of community foundations, service providers, and parents to discuss the issues raised in Heart Start and examine the extent and quality of their communities' services for infants, toddlers, and their families. Community foundations have already expressed interest in this approach. We invite readers of Zero to Three to write or call us about possibilities for organizing a Heart Start Day in your community.

The price for the complete set of *Heart Start* documents is $13.00. The Executive Summary is available separately for $6.00. Use the order form in this issue or call **ZERO TO THREE's** toll free publications number: 1-800-544-0155

Diagnosis and Treatment of Infants and Young Children with Pervasive Developmental Disorders

Barbara Kalmanson

Does he or doesn't he? That is the question frequently raised when trying to diagnose an infant or young child suspected of having a Pervasive Developmental Disorder. Parents and professionals are often perplexed by these children because it is not so much what they are doing as what they are **not** doing that leads to the diagnosis of PDD. Parents of these infants and young children are less likely to become aware of specific worrisome behaviors than to experience something lacking in the depth and quality of the interpersonal relationship. The sense of reciprocity, of expectable feeling tones between people, is missing. Parents' natural, generally subconscious expectations for interaction are violated. There is a meagerness of mutual regulation of interpersonal exchange through gaze, gesture, body language or voice. The infant or young child fails to develop a signaling system that elicits appropriate, well attuned caregiving.

The intervention approach described in this article is based on an assumption that development in all domains is dependent upon the context of the relationships in which learning takes place. Thus the relationship becomes the focal point of the intervention, even when goals related to language or sensory integration are being addressed. Because these children have a basic problem with affective mutuality, they are perplexing to their primary caregivers. Opportunities to make an affective connection are often obscure and the sense of connectedness becomes easily derailed. This article will discuss the importance of understanding parents' subjective experiences of their child and how to help parents understand more precisely the variety of perceptual confusions and sensory sensitivities impeding their child's capacity to relate. Case vignettes are used to illustrate how parents are assisted in inviting their child into mutually gratifying intimate relationships.

Infants and toddlers in a world of their own

Early signs of the disorder vary widely, from infants who appear appropriately responsive in the first months of life and only begin to show idiosyncrasies in their development during their second year to newborn babies whose initial responses lack the cues parents conventionally interpret as social.

For example, parents are unconsciously ready for the sounds of their voices to elicit a brightening, visual orienting and rhythmic bicycling movement of the babies' arms and legs. When these responses don't occur, parents are confused, but they don't necessarily know what's wrong. This is not surprising, given that the child's interpersonal difficulties consist largely of the absence of responses that are themselves small and seemingly insignificant if viewed as discrete behaviors rather than as part of an overall pattern. Parents often read every infant care book available, looking for the profile that describes their baby, but nothing quite matches. The early picture parents present of children evidencing unusual behavior as infants fits one of two extremes: either the baby was fussy, colicky, stiff and impossible to soothe, or too easy, passive, floppy, and able to spend long periods of time alone. At both ends of the continuum, parents report that their babies seemed to soothe better when left alone in their cribs, strollers or walkers, and that they seemed to be in a world of their own.

Some childrens' developmental idiosyncrasies seem to emerge during the second year of life. Parents of these babies report that their young infants were cuddly, smiley and offered typical gestures such as reaching toward the parent to be picked up. During the second year they often "lose" words they had acquired previously, become increasingly aloof, and fail to develop expectable representational capacities. The loss of early words is a mysterious phenomenon, but after some investigation into how those words were used, I have come to hypothesize that they were frequently said for the pleasure in the sounds rather than with communicative intent.

The absence of social relatedness is joined in toddlerhood by a failure to develop language for interpersonal

BARBARA HADLEY

communication. The child may talk in code, repeat favorite sounds or mimic dialogue from TV or videotapes, but the expectable intention to communicate is missing. Parents may start to feel that a sense of comfort from familiar routines has turned into a rigid insistence on keeping everything the same. Caregiving patterns may become fixed rituals. A cognitive style that is severely lacking in flexibility of thinking or responses becomes apparent. This lack of flexibility may at first seem an extreme version of typical toddler strivings toward autonomy. But peculiarities in making sense of common contingent relationships begins to reveal difficulties of a different nature than "the terrible twos." For example, one child held his chin and turned his head at every street corner after his mother had tried to help him notice the red and green lights by gently directing his gaze before they crossed at intersections. What passes for play is often a perseverative opening and closing of doors or cupboards, wandering repetitive routes through the house or around the furniture, touching everything but manipulating nothing, or meticulously lining up cars, crayons, shoes or other materials without any enactment.

Most striking in toddlerhood is the failure to develop empathy. This lack of awareness of the feelings of others is evident in the way the child negotiates the world as if he were the only one in it. He seems unresponsive and unable to participate in another's feelings or ideas. As children become older and there are growing expectations for independent activity, these children appear deceptively self-reliant. They may be quite content to move aimlessly about the house, "entertaining" themselves. What is striking is how rarely they bring something for a parent to admire, or look to a parent for social sanction, comfort, or joint pleasure in an activity. With the anticipation of greater independence comes an expectation that children will show increasing understanding of social conventions. These expectations too are violated as, for example, the comings and goings of significant people are ignored or a greeting is made by backing into someone.

Disruptions in sensory and perceptual processing

Precisely why the basic processes of social relatedness are missing in these children is still a medical mystery. Yet our knowledge of the transaction between the unfolding of relationships and developmental progress offers important clues to finding a successful approach to treatment. Like others writing in this issue, my approach is based on the notion that there are disruptions in innate perceptual and sensory processing that provide the newborn with the foundation for building relationships. Just think about a newborn's capacity to experience pleasure in the multisensory experience of being held, rocked, gazed at and talked to simultaneously, and imagine the sense of disorganization and overstimulation experienced by a baby whose sensory-perceptual system is compromised.

Some of the characteristics of children with signs of PDD from early infancy, such as gaze aversion and avoidance of physical closeness, may be related to the typical experience of newborns, who can do little to control distressing stimuli beyond averting their gaze or arching away. Although such maneuvers do cut off the feeling of interpersonal connection, the baby is using them to manage experiences of being overwhelmed by stimulation, not to send a negative social signal. Nevertheless, parents' feelings are hurt. They interpret the baby's behavior as an intentional communication, meaning, "move away, look away, or put me down."

Thus, just as typically developing infants elicit caregiving, interaction, and play, these babies also elicit caregiving patterns from their parents. Unfortunately, because parents are trying to adapt to their baby's needs, parents of infants with PDD can become entrained to non-interactive, idiosyncratic patterns that inadvertently reinforce the disability. For example, it is not unusual for me to see parents wash and dress their children from behind, not face to face—or hold them on their laps, facing away, at the outer edge of their knees. Especially when the baby is the first child, parents are unaware of doing anything unusual in their caregiving. What they are aware of is that the relationship doesn't feel gratifying.

"Normalizing" and "diagnosing"

Many parents gradually become aware of their children's atypical development. This process often involves an emotional see-sawing between feelings that the child is OK, feelings that there are developmental difficulties, and feelings that the problems in relating are their fault. Parents seem to go through this process of diagnosing and normalizing their children's behavior long before they enlist professional assistance. Like almost all parents, they assume things are generally fine and worry a lot about little incidents. The working assumption that a child is developing normally can lead parents to blame themselves for the difficulties they experience in relating. If they experience their child's unresponsive behavior as volitional, they may see it as a rejection of them as parents. By the time most families seek professional assistance, parents have spent many hours observing their child and thinking about his behavior. Many parents are gifted observers of their children and can lead professionals to a sensitive understanding of their child.

Some common categories of interpretations of behavior work to help parents maintain an image of their child's development as typical. Some parents think of the child's withdrawal and hypersensitivity to stimuli as evidence of special creativity. Unfortunately, this perception can lead parents to conclude that the child's thought processes should not be interfered with and the child shouldn't be disturbed. For example, one child's insistence on sameness was thought of, in the abstract, as evidence of his memory skills.

Individual instances of behavior can become exaggerated or overgeneralized upon reflection. One father told me he thought of his son as very affectionate. He based his impression on the child's instant interest in a new neighbor and his approach to a stranger on the street. It was only through lengthy discussion that he realized his son's friendliness toward a person didn't grow over time, and that in fact he could show no recognition of people who knew him well.

Inconsistencies in the child's behavior make it more difficult for parents to identify distorted qualities of relatedness and can delay seeking treatment. Moreover, parents' expectable predisposition to think of their child as developing within the normal range shapes their perceptions of individual instances of unusual behavior. Discrete events are interpreted through perceptual filters that make them seem congruent with the parents' internal working model of who the child is. For example, one mother was sure her son made eye contact as she talked about him during an assessment session. Only after extensive observation together was she able to notice the sidelong fleeting quality of his gaze and the physical distance from her required for those moments of eye contact to occur.

When I first meet parents, they are often struggling with questions about whether the child's symptomatic behaviors are volitional or not. Their perceptions regarding the child's intentionality are frequently the first topic I encounter in our assessment sessions.

Untangling perceptions: A first goal in treatment

One of my first goals in treatment is to help parents untangle their perceptions. It helps them to understand that the difficulties in their relationships are in large measure due to constitutional challenges in the child that are impeding the capacity for relatedness.

Directly trying to educate parents to this fact rarely works. The child's behavior is so inconsistent, the missing qualities of empathic relatedness are so elusive, and the propensity to blame oneself is so strong. Instead, I find the success of the intervention depends on my ability to learn about the parents' subjective experience of the child. By eliciting parents' perceptions of what their child is doing and not doing, and why they think the child is behaving in a particular way, I work toward establishing a mutual understanding of the importance of the meaning of feelings and behavior to our work. Together we try to make sense of what has gone awry in their child's development and relationships.

Earning parents' trust that I can genuinely appreciate their experience is essential to establishing a working alliance. As I understand how they came to their point of view, parents gradually begin to reconsider perceptions about their child and how these notions have affected the infant-parent relationship. This process enables parents to empathize with the child's experience in a new way and leads to developing new strategies for inviting their child into the social world.

Designing intervention with the child and family

The next challenge of treatment is to begin to invite spontaneous purposeful interaction with a small person who is tuning out, wandering around, and operating in an idiosyncratic, impersonal manner. To achieve this goal I work with parents in core areas similar to those described by others in this issue:

1) follow the child's lead;

2) use play as a means of interaction;

3) figure out areas of sensory sensitivity and create interpersonal buffers for them; and

4) explore the meaning of the child's behavior in order to match attempts at engagement to the appropriate developmental level and emotional concern.

Given the multiple developmental challenges these children present, it is often tempting to involve a number of professionals to work on language, fine and gross motor skills, sensory integration, cognitive development, parent counseling and psychotherapy. This raises the question of how many therapists to enlist. Because these children have a basic problem with the affective quality of their interpersonal relationships, the initial work needs to focus on establishing reciprocal positive feeling tones in primary attachment relationships. Since all learning takes place in the context of relationships, such an approach makes the child more available for learning in other developmental domains.

In most cases, I want to establish a hierarchy of attachment figures beginning with the primary caregivers. I often act as a coach and translator working on the sidelines of the interaction between the parents and the child. In cases where parents have lost heart and need direct evidence of their child's social potential I will temporarily interact directly. When other professionals are involved, I prefer them also to act, as I do, as coaches to the parents, so that the child will not interpret from the adults' behavior that we think people are interchangeable. Many families need some time to establish the centrality of the parent-child relationship and the role of that relationship in preparing the child for a widening interpersonal world. How a team proceeds depends on the assessment of the spontaneity and reciprocity in the relationships and the parents' sensitivity to the child's sometimes elusive cues. In general, the more the child looks to the parent for social cues, nurture and interaction, the better the treatment proceeds. In some cases, where the attachment seems fragile, I worry that expecting the child to manage multiple relationships early on in treatment runs the risk of prolonging the interpersonal difficulties in making well-differentiated attachments. Once the child is on the road to normal social relations, the other areas of disability such as language or motor control become more amenable to traditional treatment approaches.

By observing how the child is managing his world I can set a tone for following the child's lead in play and in caregiving routines, and decipher how his particular sensory sensitivities affect his attempts to master developmental challenges. Following the child's lead does not mean becoming a silent shadow—these children could overlook the therapist forever. On the other hand, one doesn't want to become intrusive, for fear of overwhelming the child's sensitive perceptual system.

The initial trick is to figure out how to get noticed in a positive way. I observe with parents how much and what kinds of bids for interaction draw the child's attention and stimulate an affective connection. In every observation, I also work with parents to figure out the kinds of sensory sensitivities and perceptual confusions that seem to be interfering with the child's sociability. Once we identify areas of sensitivity and how the child attempts to manage them, we are in a position to create environmental and interpersonal buffers that enable the child to engage in a focused manner.

I attend to the tone, pitch, and rhythmicity of my voice, the intensity and sources of ambient light, the changes and intensity of visual displays made by facial expression, and the tolerance for touch. I observe the child's capacity to integrate visual, auditory, tactile, and olfactory stimulation across modalities. For example, can the child and I look at each other and talk while I rest my hand on his shoulder? Or, if I'm talking do I need to slow down changes in facial expression and keep my distance? Through observing caregiving routines and through play, I try to find ways for the child to gain control over sensory input by creating pleasurable interactions that can increase the intensity and amount of interpersonal contact in small doses.

The following vignettes illustrate how these core approaches are integrated into my work with parents and their young children.

Janie

Janie's parents arrived at my office depressed and exhausted. They hadn't had a pleasant moment or a night's sleep since she'd been born 18 months ago. As medical professionals they had tried to find a context for her extreme irritability. For a long time they had settled on a diagnosis of colic, but the irritability had gone on too long. There were other worries too; Janie had spells of staring into space in the car and in the bath, waving her hands in a funny way. She often screamed for entire car rides, never calming or falling asleep to the motion. Friends would hold her and remark on how stiff she was. She didn't show any preference for her mother, who had quit work in order to care for her daughter full time. Janie's mother had begun psychotherapy for herself and was taking antidepressants, but her relationship with her daughter had not changed. Fortunately, mother's therapist recommended an evaluation of Janie by an infant specialist.

Janie appeared much as her parents described her. She looked at the floor and made no eye contact. She rejected any bids for interaction by turning away, and she struggled away from physical contact. Janie was content to sit in a corner with her back to us and examine small toys in a basket. The slightest frustration ignited panic-stricken squeals and fast breathing, with no signs of anticipating or requesting adult assistance. Her mother read these signals as desperate pleas. As her anxiety escalated, she sprung into immediate action. The affective tone in her voice matched her daughter's panic. The combination of Janie's extreme irritability and lack of positive feedback toward her mother led the mother to think of herself as an irritant to her daughter and led her to leave the toddler alone to manage disorganized states. There were two important disadvantages for Janie in this approach: 1) she was left to isolating, self-stimulatory activities; and 2) she lacked experience with well-modulated social stimulation, carefully attuned to her capacities for relating.

It became apparent to me that the common thread in Janie's problems was a hypersensitivity to visual and tactile stimulation and an inability to modulate her affective experience. She was busy warding off being overwhelmed by the intensity of sensation and emotion. When she was overtaken, she panicked. Once her parents understood how this hypersensitivity could be affecting her behavior and capacity to relate to them, we were able to implement some very effective interventions.

The reflected light on water or glass was intolerable for Janie, so we carefully controlled ambient light. Her staring spells during bathtime were eliminated by using only a hall light, and the ones in the car were reduced by using a shade. Janie's parents were also able to simplify her visual environment. They began playing with her by lying next to her on the floor, careful to keep their heads below hers so that she didn't have to look toward the light source in the room to look at them. Janie became intrigued by games of peek-a-boo and coming and going, especially when she controlled the visual stimulation. Janie covered her mother's head with a blanket and pulled it off. Janie ran to hide behind the chair and came back to her mother's side.

The most significant progress was made by helping her mother understand what had happened between Janie and herself, and what Janie needed from her. Janie's mother had felt defeated and unable to communicate with her baby. At first she would panic herself and rush to action at the first hint of Janie's desperate distress. Later, exhausted, she began to leave Janie to her own devices and put her in her crib when she was irritable. I worked with the mother to help her understand how her relationship with her daughter would change when Janie was able to use her as a mediator and container for overwhelming experiences. By observing my own visceral reaction to Janie's panic, I was able to acknowledge the naturalness of the mother's response and bring up the need to behave counter-intuitively. Mother began to realize that her own panicked affective tone merely confirmed the danger of the situation for Janie. Her mother learned to take a deep breath and then use calm, reassuring tones which enabled Janie to accept her mother's help.

During one session when Mother was particularly fatigued, I learned that she had been away overnight and Janie had been cared for by her aunt. Janie seemed especially interested in coming and going games, but her mother tried to reorient her to play by herself, stating she had no energy. When we talked about the meaning of separations to young children and how they use play to master the experience, her mother realized the importance of the game and found the energy to pursue it with more comforting tones. She also recognized that she hadn't thought about such issues with Janie because the child seemed so detached.

After several rounds of "Janie goes away, but she always comes back to Mommy," Janie pulled her bottle out of her diaper bag and leaned her head on the couch. I told her how good it would feel to sit with Mommy and drink, which she did briefly, but with a softness that allowed her to lean her back against her mother. In a moment, she popped up and worked a puzzle, but she was tired and became fussy over it. Mother retreated and told me it would only get worse if she got involved.

I carefully suggested that Janie really needed her mother to help her contain the experience. I offered suggestions about how to provide structure and redirection, coaching Mom through the event. Janie completed the puzzle, smiled at her mother and went for her bottle again. This time she sat on her mother's lap, chest to chest. Janie turned her head side to side which her mother took as a signal to put her down, but I encouraged her to talk softly and let Janie find a comfortable position. Mother's body relaxed as Janie settled her head on her mother's shoulder and both bodies molded to each other. Mother told me Janie had never done this before. I talked to Janie about how cozy she was and how much her mommy wanted to cuddle like this because she'd been missing it for a long time. Janie reached a hand toward me, then she sang to herself, closed her eyes and fell asleep. A tear rolled down her mother's cheek as she told me how she'd never been able to hold her baby like this or have her fall asleep in her arms. Amazingly, Janie slept all the way home in the car. As if recognizing the need, Janie spent many of the following sessions practicing close physical contact with her mother. Weeks later, Janie was able to offer a hug, first by leaning into her mother with her arms stiff at her sides, and finally with her arms around her mother and her head on her mother's shoulder.

At two, Janie regularly naps in the car. She is developing communicative language and lingers lovingly over the word "Mommy" as she calls to her mother or shares a game. She is still very sensitive to stimuli, but her mother can now make sense of her daughter's distress. She realized that Janie had been troubled by the dappled light filtering through the trees when they went on a walk through a forest. She showed Janie how the toy stethoscope worked by placing it on her own body first. When Janie screamed and refused to use a bandaid on a cut, her mother was quick to understand the tactile sensitivity. She could now see the merit in allowing Janie to play with bandaids, to put them on dolls and on her parents over and over until Janie decided to try one on herself.

Amanda

A young mother and I developed sound games for her four-year-old daughter Amanda who, we discovered, withdrew from the people in her world partly because of her auditory sensitivity and her inability to modulate her affective experience. When we met, she lived in a fantasy world of video tape dialogues. Amanda used very idiosyncratic language and made noises to herself that disrupted her school and family life. She had difficulty comprehending ordinary conversation and didn't follow even simple requests. She made attempts to ward off the verbal world while she was hypervigilant toward visual information. Her video monologues seemed more like an effort to control the auditory-verbal space in the room than expressions of communication.

Amanda was intruded upon and entranced by the whisper-soft ticking of the clock in my office. Although she ran away when children approached her at the playground, she surprised and offended them by sneaking up behind them and snorting or roaring loudly. Given the encroachment of the clock, I imagined the roaring was her way of letting us know how she experienced most children's approaches. It was also her way of making another child feel the way she felt much of the time—overwhelmed by sound. Rather than solely focus on her feelings about the noisy children or her mechanism of turning passive into active, I wanted to give Amanda a playful, interactive means to learn to manage this auditory sensitivity.

After months of work helping her mother make more reciprocal contact with Amanda, a game evolved in which she hid under my desk and surprised us with animal noises. It began by my pretending to be startled and frightened by a noise she made. Amanda so enjoyed my feigned vocal distress that she was also able to find pleasure in the little auditory surprise she had to cope with. She laughed at our mutual game; Amanda startled us, and we startled her just a tiny bit by voicing pretend distress. We had a shared experience of being alarmed by unexpected noise, and an affective connection formed around managing the intrusion. Rather than withdraw into her private world, she let us join her and provide a practice zone for managing stimulation. Amanda was able to use the affective connection and the sense of mutuality in the game to transform the sense of fear of the unexpected into a sense of pleasure in the unexpected. Her mother's understanding of the value of this game in helping Amanda use her affective connection to us to learn to mediate and contain stimulation enabled her to use similar devices at home.

By the end of the next school year, Amanda felt greater control over this sensitivity and an increased capacity to seek help from others. She told me that although she still hated music circle (the prior year she'd made bizarre noises, crawled away from the group and rolled around on the floor), she now managed it by putting her hands over her ears sometimes and by sitting next to the teacher.

Sam

Sam was referred by his nursery school at age three because he talked to himself in a private language made up mostly of 't' sounds and high-pitched screeches. He didn't play with the other children, and was at times aggressive toward them. (It turned out he spent most of his time throwing small toys behind a couch and ignored the other children so thoroughly that he'd step on them as he made his way around the room.) They were also worried because he would bang his head on the floor or furniture, and he never looked at anyone. He spent long periods of time laughing to himself and inarticulately, perseveratively repeating key phrases from his favorite videos. His mother was masterful at decoding his private language and was therefore more able than others to be contingently responsive to him. Her skill at understanding him had also masked the severity of his difficulties. Though she told me she had thrown out the child development books because Sam seemed more irritable than any of their descriptions, she had also sent him along to preschool with her friends' children, unprepared for the school's concern.

Sam lacked any sense of mutuality. This was most apparent in his failure to use mutual gaze for interpersonal regulation. At times he would offer his mother a fleeting glance. But it was apparent that he found the intensity of eye-to-eye contact unbearable. He became increasingly able to make eye contact at a distance of three feet or more as long as one didn't try to make any other sensory contact in the moment. He enjoyed chase and tickle games and gradually allowed more close-proximity eye contact through these games. He became more able to look at people when we developed a style of telling him—"I like to see your eyes"—whenever he made a request. In my office, he spent weeks relating to me only through a puppet I wore on my hand. My first evidence of progress was when he entered the office, took the puppet off the shelf and put it in my hand.

Sam's brother wore thick glasses. One big problem at home was that he pulled his brother's glasses off and bent them every chance he got, but especially when his brother came home from school. I learned some sessions later that Sam also regularly threw a toy school bus toward the window when his brother left the house in the morning. Making connections between these events helped the family understand that Sam was quite likely having strong feelings about separations as well as difficulty managing the intensity of mutual gaze.

Sam discovered the perfect toys for working on the eye contact problem in my office. He found a cow with eyes painted as if asleep, a horse with intense black eyes, and a Mr. Potato Head with glasses. Session after session we examined these eyes—sleepy eyes, friendly "wake up" eyes, and eyes with and without glasses. Soon Sam wanted to tape wake up eyes on the cow, and he pranced around the room wearing Mr. Potato Head's glasses and putting them on the puppet. At home, he manipulated small knight figures with visors.

The brother arrived mid-way through one session in the family's home. As soon as he knelt beside Sam to greet him, Sam grabbed his glasses, bent them in two and threw them. For the rest of the session we helped Sam pretend to be the one who left and returned. Toward the end of the visit Sam grabbed for his brother's glasses again. This time I told him his brother needed the glasses to see Sam. He wasn't wearing the glasses to keep away from Sam, like the visors on the knights. Sam was quiet but clearly listening. All this transpired just as I was about to leave, and as I said good-bye, Sam leaned over and kissed my cheek. Finally someone understood. This session was followed by many focused on obstructions to eye contact, and being close to people. This vignette illustrates the use of play to address the sensory sensitivity directly, while exploring the meaning of a child's behavior in order to address the emotional concern interacting with the sensory vulnerablility.

At four, Sam still banged his head when he was stressed or frustrated, and his language was primarily for his own private use. He began engaging in chase games with other children though he typically made himself the victim. He was capable of expressing warmth with his family members and had developed mutual gaze at a distance and an endearing interpersonal smile. By the time Sam turned six and a half, he was able to be integrated into a regular Kindergarten with a small class size. At the end of the school year, his mother brought me his report card, tears streaming down her face as she waved it at me. The teacher's written comment said she was pleased to see how many friends Sam had and how well he played with the other children. She also wrote, "he's a happy and popular boy."

Summary

These vignettes typify my work with families. They illustrate the integration of listening for and empathizing with parents' subjective experiences and helping parents imagine what the world feels like to their children. The simultaneous use of play to follow the child's lead, address sensory sensitivities directly and explore emotional concerns, invites the child into the social world and reassures him it won't be too overwhelming or intolerable.

In all my work with children with Pervasive Developmental Disorders, their parents are always my best allies. I have been touched by their warmth, stamina, thoughtfulness and perseverance. The creativity and patience of each family I work with enriches my capacity to assist others.

Approaches to the Development of Social Communication in Foster Children with Pervasive Developmental Disorder

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All caregivers of children with Pervasive Developmental Disorder are challenged to engage their child in ways which will both minimize the impact of the constitutional maturational vulnerabilities the child faces and promote shared attention, mutually pleasurable interaction, and reciprocal social communication, all critical markers of early emotional development (Greenspan, 1992). **Foster caregivers** of children with PDD face a special challenge. The chaotic and/or abusive experiences leading up to the placement of children in foster care significantly undermine any foster child's capacity to negotiate an interactive relationship with a foster caregiver, in which early emotional development can progress. When a child with the constitutional-maturational irregularities associated with PDD experiences the early history associated with foster care entry, the challenges faced in establishing an interactive relationship with a foster caregiver are significantly intensified.

We will review the general principles for working with all PDD children, then describe the unique challenges which foster caregivers face in working with PDD children in foster care. A case study will follow which illustrates the therapeutic interventions which we have found helpful to foster caregivers who face the unique challenge of parenting a foster child width PDD.

Self-regulation and shared attention

Greenspan (1992 and this issue) has described a conceptual and treatment approach which involves children and parents in an interactive process essential to emotional development. Greenspan's model is very useful in working with children with PDD characteristics, in that it acknowledges the significant impact upon emotional development of constitutional maturational vulnerabilities, such as those which characterize pervasive developmental disorder. The approach focuses initially on the promotion of **self-regulation in the child,** and **shared attention** between the child and the parent. To promote self-regulation and shared attention in children with PDD characteristics, interventions focus upon helping parents discover both the senses through which the child most readily maintains attention, and the senses through which the child is hyper- or hypo-responsive, and consequently irritable, inattentive, or withdrawn. In addition, interventions center around helping parents "reach" the PDD child. Parents are initially encouraged to reach their child through those senses to which the child is most responsive. Then, at increased intensity, parents are encouraged to communicate through those senses to which the PDD child is hypo-responsive. Finally, with very low intensity, and in small and careful increments, parents are assisted in communicating with their child through those senses to which the PDD child is hyper-responsive.

In our work with foster families, however, we have found that a foster parent's capacity to foster self-regulation and shared attention in a child with PDD characteristics is often sidetracked by the experiences the child brings to foster care. Many children enter foster care from chaotic, disorganized, and maltreating environments in which the capacities for regulating the sensory and affective systems were continually undermined. The developmental vulnerabilities which derail the development of self-regulation and shared attention in all children with PDD are intensified, therefore, by the events in the environment which led to the PDD foster child's entry into care.

> *A foster parent's capacity to foster self-regulation and shared attention in a child with PDD characteristics is often sidetracked by the experiences the child brings to foster care.*

It has been our experience that many foster caregivers attempt to repair the behavioral disorganization with which foster children present by providing a great deal of structure, organization and routine in their foster homes. A foster caregiver must ensure, however, that her provision of structure and routine does not become too rigid. This would not necessarily be helpful to the child with PDD, whose sensory irregularities may require a good deal of spontaneity on the part of the caregiver. For such a child, therefore, foster caregivers must balance the inclination to provide reparative structure and consistency to the child from a chaotic home with a great deal of sensitivity to the child's unique sensory irregularities.

Emotional engagement

The development of **engagement** is the second essential process which must be negotiated for early emotional development to progress (Greenspan, 1992). To help parents support their child's developing capacity to form attachments and "special" relationships, we help them to identify the subtle, weak, and idiosyncratic signals that the child with PDD may use to show his interest in the human environment. In addition, parents are assisted in responding to these signals in a robust and pleasurable manner to show respect for the child's uniqueness and to encourage the child's interaction with the human environment. Finally, parents are encouraged to expand their child's repertoire of social and emotional communicative signals by building upon, modifying, and introducing a wide range of affective signals.

A **foster parent**'s efforts to engage the child with PDD in mutually pleasurable interaction, however, is challenged by the child's early history, as well as by the foster care experience itself. The developmental vulnerabilities which undermine such a child's capacity to establish face-to-face contact and a special sense of human connectedness are greatly intensified when that child is in foster care. The insecurity of attachment to the maltreating biological parent and to multiple foster caregivers undermines the child's capacity to engage in a mutually pleasurable, "special" relationship with the foster parent. The foster caregiver requires therapeutic assistance in engaging a child whose developmental vulnerabilities and early relationships conspire in a downward spiral.

Clinicians may need to help foster parents reframe their role to emphasize interactive play rather than didactive teaching.

The foster parent, in addition, brings her own ambivalence to the relationship: knowing that the placement is time-limited and that the child may be returning to the biological family inhibits the foster parent's total emotional availability to the foster child. Interventions may be necessary with both the foster family and the child welfare system which focus upon **permitting** attachment to develop. With foster caregivers, interventions may need to focus upon helping the foster parent appreciate the child's developmental need to experience and internalize a model of a "special person" in his life; exploring with the foster parent her anxiety over nurturing a temporary relationship which may end in loss; and exploring loyalty conflicts that the foster parent and child may feel in developing this attachment relationship.

Reciprocal social communication

The third essential process which must be negotiated for early emotional development to progress is the establishment of **reciprocal, social communication** between the child and his/her caretaker (Greenspan, 1992). To help parents **support** the development of gestural and symbolic two-way communication with a child with PDD, therapeutic interventions focus upon helping parents becoming a more active partner while interacting with their "unique" child. While the child may have a tendency to engross himself in solitary activities, avoiding eye contact and human interaction, parents may have to introject themselves to "force" a response from the child. In addition, parents may require therapeutic assistance in understanding the child's stereotypic and idiosyncratic behavior as a form of communication and making it interactive; following their child's lead in play interaction; and elaborating their play interactions to support increasingly complex sequences of reciprocal interaction.

These challenges are, again, intensified for both the foster parents of children with PDD characteristics and the children themselves. The child with PDD in foster care is uniquely challenged by his history: whereas most children with PDD characteristics may enjoy islands of contingent, reciprocal interaction with their parents, many such children in foster care have experienced a continuous history of non-contingent interactions in their biological homes. Foster caregivers face a unique challenge as well. It has been our experience that many foster caregivers define their role vis a vis their foster child as "teacher" rather than as "interactive partner". Clinicians may need to assist foster caregivers in reframing their role in a way which would de-emphasize didactic teaching of their foster child and emphasize interactive play.

Case study

Twenty-nine month old Robert was referred for a developmental assessment by his foster mother, who was concerned that he was slow, passive, and unresponsive. Robert had lived under the care of his biological parents during the first 11 months of his life. He was said to have sleeping and feeding problems, to have taken Isomil until he was fourteen months, and to have had a slow weight gain.

His father was very suspicious of his mother's association with other males and checked on her every fifteen minutes at her job. He was also physically abusive to her. Mother eventually left Robert and his older sister with his father and moved out of the state. Father left the children with a neighbor and did not come back for 3-4 weeks, resulting in their placement in foster care with Mrs. W. Robert has not seen his parents since then. He has had regular visits with his sister but does not interact with her, and during these visits, he gets engrossed in solitary play.

When first placed with Mrs. W., Robert was very slow, passive, and unresponsive. His developmental milestones were delayed. At eleven months, he was able to sit, but did not crawl or pull to stand. He did not vocalize, babble, or say any words. His affect was flat, and he was withdrawn. With Mrs. W.'s persistent efforts, Robert gained weight and progressed in his motor milestones. However, he remained aloof and did not interact with other children, and preferred to play alone. Mrs. W., who was already involved with me (J.K.G.) for caregiver-child interactional therapy with another foster child, was concerned and requested a developmental assessment for Robert.

A psychological assessment at 29 months found Robert to be mildly intellectually limited with autistic-like features. He exhibited delays in receptive and expressive language development and in gross motor skills. Comparatively on the Bayley, his visually based skills were better developed than his language-based skills. In addition to other recommendations regarding his placement, Robert was referred for special education services and for child-caregiver interactional therapy to promote Robert's capacity for social interaction and communication. On referral to parent-child interactional therapy at age 30 months, Mrs. W. reported that Robert exhibited a variety of disturbing behaviors, including spinning, hand flapping, perseveration, isolated play, sudden bursts of unrelated activity (involving "baby like" kicking, jargoning, and running around), difficulties with changes in routine, oppositionality, and language delay. School behavior problems, including hitting, biting, kicking, and temper tantrums, were also noted.

On assessment of the caregiver-child interaction, Robert played by himself, and did not initiate any visual, verbal, or affective contact with Mrs. W. or myself. He had a short attention span and was visually and auditorily distractible, moving from one activity to another. He displayed increased motor activity, moving all the time. His facial expressions were limited, and his affect was constricted in range. He closed very few circles. Mrs. W.'s affect was constricted; she seemed to prefer verbal interaction as opposed to gestural interaction. Mrs. W. initiated verbal contact with him by directing him and asking questions about what he was doing and teaching him various aspects of the toys, i.e., colors, shape, names, etc. Robert would respond to her questions by giving her one- or two-word answers and then moving on to play with something else. Their play time together would result in both "doing their own thing." Robert did not acknowledge me, as if I were not present in the room. After persistent attempts to interact with him by moving in closer and closer and including myself in the activity in which he was involved, Robert eventually acknowledged me by making fleeting eye contact and reciprocating my gesture. Robert was able to sustain his attention longer when I engaged him with a simple motor game of playing catch. During this interaction, Robert not only closed several circles in a row, he became more verbal and affectively expressive.

Hence, Robert seemed to have difficulty regulating sensory, attentional, motor, and affective processes. Additionally, he had difficulty in relating and interacting with others and dysfunction in language and cognitive development. His interactional difficulties may have been exaggerated by the chaotic, disorganized and unpredictable environment in his biological home.

During subsequent caregiver-child interactional therapy sessions, Mrs. W. learned to gain and maintain Robert's attention by engaging in motor interaction with him, involving playing catch, rolling cars back and forth, racing cars, etc. Hence, Mrs. W. discovered that Robert was most attentive through motor activity and least attentive with verbal interaction and that she needed to combine verbal and motor gestures to help Robert maintain his attention during the interaction. She also found that as she made contact with him through his motor system, he became more affectively engaged.

As Robert and Mrs. W. exchanged motor gestures, Robert's engagement with Mrs. W. grew warmer, richer and deeper. He started to express a wide range of affects. He no longer looked sad and withdrawn. He expressed his pleasure and displeasure strongly. He became very possessive of Mrs. W. and would become jealous and upset when she played with her other foster children or attended to their needs. Mrs. W. saw Robert's "selfish" behavior as "bad" and "spoiled" because "he should know that she needs to share her time equally among all her foster children."

I invited Mrs. W. to explore her early childhood experience. She talked about not having been brought up by her parents and growing up feeling "different" because she did not know her father. She connected her own experience to a discussion of how "special" relationships are important for a child's emotional development and began to understand that Robert was not necessarily "spoiled" when he became possessive of her attention and affection. We explored the loyalty conflict that she felt of not wanting to replace Robert's biological mother.

When Robert became possessive of his foster mother's attention and affection, we explored her feelings about not wanting to replace Robert's biological mother.

As Robert had a tendency to engross himself in solitary play and avoid eye contact and human interaction, I worked with Mrs. W. to encourage her to be a more active partner in her interactions with him. When Robert played with the doll house, repetitively taking furniture out of the house and putting it back through the window, Mrs. W. would knock at the door, initiating the "Knock-knock", "Who's there?" game. Or she would become Robert's assistant to hand him the furniture by asking which piece he needed next. This helped them "close several circles" in a row, and encouraged Robert to make eye contact by catching Mrs. W.'s gaze when he looked up to see which piece he wanted next.

Mrs. W. had indicated that Robert was frequently "silly" and "baby-like" at home, exhibiting sudden bursts of unrelated activity involving kicking, jargoning, running around aimlessly. Mrs. W. either ignored Robert or told him to stop acting like a "baby". During one of the therapy sessions, Robert suddenly started jargoning and running aimlessly from one end of the room to the other. When I got up and joined him in running from one wall to the other, Robert stopped to see me run. When I reached the other end and stopped to look at him, he started to laugh and ran to the other end of the room. This way we took several turns running from one end to the other. This turned the previously aimless and solitary activity into one which was playful, pleasurable, interesting, and, most importantly, **interactive.**

One of Robert's favorite activities was to be picked up by Mrs. W. so he could look at himself in the mirror.

making faces. When she would put him down, Robert would ask her to pick him up again. They would repeat this cycle over and over. On one particular occasion when Robert stuck his tongue out at the mirror, Mrs. W. imitated him. Robert found it very amusing and stuck his tongue out again; this developed into a prolonged interaction, with Mrs. W. varying her facial expressions and making them more complex and Robert imitating her and adding some of his own.

Robert became more interactional, affectively expressive, and verbal, demonstrating rapid language development. He was able to sustain his attention for increasingly long periods of time. Stereotypies, perseverative behavior, and "sudden bursts of unrelated activity" virtually disappeared once Mrs. W. responded to Robert's idiosyncratic behavior by imitating him and turning such behaviors into playful interaction. Many special sessions were devoted to exploring Mrs. W.'s concerns regarding her conflict over "spoiling" Robert. She was concerned that by reciprocating his "babyish" behavior, she would reinforce it, and subject herself to criticism from the many people involved in the child welfare agency.

Foster parents who care for children with severe symptoms should define themselves as professionals and be provided with the therapeutic and financial support to fulfill that role.

As Robert developed more complex, reciprocal gestural communication, he started to show the beginnings of representational capacity. Unfortunately, his symbolic play, especially around negative affective themes, was not supported and encouraged by Mrs. W., whose style was more didactic and judgmental. For example, when Robert came over and touched my nose, I responded by saying "honk! honk!". This turned into a game of Robert touching my nose and my responding "honk! honk!". Mrs. W. was uncomfortable with this as she felt that Robert was being "mean" by pinching my nose. On another occasion when Robert expressed his anger by hitting a doll, Mrs. W. told him to be nice to the doll. We discussed reality vs. fantasy play and the importance of fantasy play in helping children understand their world by working through their negative emotions in the safety of fantasy. Mrs. W. gradually started joining Robert in his pretend play. It was interesting to note that even though Robert had become quite interactive gesturally, he tended to once again be involved in solitary play when playing symbolically.

I suggested ways in which Mrs. W. could become an active partner in reciprocal symbolic interaction with Robert by introjecting herself into his solitary symbolic play in such a way that he had to respond to her. However, Mrs. W. told me that she wished to stop the caregiver-child interactional therapy sessions because Robert was not experiencing any behavior problems at school or in the home.

Although Mrs. W. may or may not have been an example of this phenomenon, it is not unusual for parents and caregivers to have some difficulty dealing with symbolic interaction/pretend play, especially if the play opens up themes that may be troubling to adults, such as aggression. Rather than confront a family, I leave the door open for future work together. I shared with Mrs. W. our sense that although Robert is well on his way to the road of social communication, he may need more help in the future at certain developmental stages. I invited her to keep in touch with us periodically to monitor his progress, as well as to provide consultation should difficulties arise.

Mrs. W. was also encouraged to work with Robert's teacher at his school placement to encourage the teacher to apply some of the same principles that she was working on with Robert to promote his social and emotional development. Work with Robert's foster care worker centered around permanency planning and strategies for making his visits with his sister more interactive.

Discussion

Clinicians who treat children with PDD characteristics within foster care may need to assist both the foster caregiver and the child welfare system in reexamining the relationship between the foster parent and the child. Many foster parents focus on their foster child's feelings of deprivation and rejection, and believe that if the child is provided with a safe, nurturing and loving foster home, the child will thrive. Whereas this approach may have worked for most of the children entering foster care in years past, many of today's foster children enter out-of-home placements with significant psychopathology (Hochstadt et. al., 1987). For these children, love is simply not enough. Children with PDD characteristics in particular require caregivers who understand their foster child's unique vulnerabilities and who are committed to the major effort involved in engaging their child in an interactive relationship. In order to facilitate this, clinicians may initially need to provide training to child welfare workers around the importance of **preparing** the foster parent for a child with significant emotional challenges, and **assessing** the foster parent's willingness to meet those challenges. It has been our experience that many foster parents are woefully unprepared for the challenges which they are about to face when they welcome a child into their home.

If the clinician becomes involved with a foster family in which a child with PDD characteristics has already been placed, the clinician will need to describe the severity of the child's difficulties to the foster parent **in the presence of the foster care worker** in order to avoid later confusion and collusion around the foster parent's involvement in the child's treatment.

It goes without saying that placement stability should be a priority for all young children in foster care. For a young child with PDD characteristics, stability is essential in promoting the engagement and attachment necessary for emotional development. The child's own behaviors, however, may jeopardize the stability of his placement. Foster parents may find themselves increasingly alienated from and angry toward a child who is, at times, poorly related, idiosyncratic, and socially isolated. The clinician will need to confirm the validity of those feelings for the foster parent, but at the same time appeal to the professionalism and the expertise of the foster parent in encouraging the parent to maintain her commitment to the child.

This cannot be accomplished without the support of the child welfare system. In fact, the clinician may need to assist the foster care worker and the foster parent in significantly redefining the foster parent's role. In order to foster a child with PDD characteristics, it is essential that a foster parent become an active and central participant on the therapeutic team. Foster parents must be willing to provide daily therapeutic experience, at home which will extend the interactive principles upon which the clinician is focusing in treatment. In addition, the foster parent may need to play a central role in coordinating the other services the child is receiving, and in providing whatever home-based interventions are entailed in those services. The child welfare system may need to support this effort by reducing the number of foster children in the home of a child with PDD characteristics, or providing "flexible funds" for the child care of other foster children to enable the foster parent to provide intensive, interactive time with the PDD child.

The clinician may need to catalyze the effort within the child welfare system to redefine the role of **foster parent as a professional,** and to provide the training and interventions which would enable a foster parent to fulfill that role. Only when foster parents define themselves as professionals and are provided with the therapeutic and financial support to fulfill that role, will they be able to provide the caregiving required by a young child with as severe a constellation of symptoms as pervasive developmental disorder.

References

Greenspan, SI. 1992. *Infancy and Early Childhood: The Practice of Clinical Assessment and Intervention with Emotional and Developmental Challenges.* Madison, CT: International Universities Press.

Hochstadt, NI, Jaudes, PK, Zimo, DA and Schachter, J. 1987. The Medical and Psychosocial Needs of Children Entering Foster Care. *Child Abuse and Neglect, 11,* pp. 53-62.

Simon: continued from page 20

This was real progress in at least five ways: 1) he attended with his back turned; 2) he was responsive to my tone; 3) he was on target in terms of receptive language processing; 4) he was able to discover an alternative way to verbalize acceptance of the command; and 5) all this occurred even while he was quite excited.

During this early period of treatment I tried to help Simon's family appreciate the growth promoting power of cue-based, reciprocal turn-taking and expressive, gestural communication. It was important for them to work harder to catch and extend his gaze and find the optimal level of facial expressiveness—what Simon could tolerate without having to avert. Mother, in particular, needed help to slow down, minimizing volume, words and touch while also responsively modulating expressive and gestural cuing. And both parents have needed consistent encouragement not to fall into scripted, stereotyped dialogue with their repetitive son. It is perhaps not surprising that, during this period, they found with great pleasure that they were able to get him to respond to the babyish requests, "Show me your hair!, Show me your belly button!" and the like.

Setting limits and providing authentic responses

It was crucial to help Simon's family to remove from his life almost all media with repetitive potential, especially video tapes. Parents of hyperactive, unfocused and/or nonverbal children are often relieved to find that their children watch quietly, seem to attend to and even repeat the sounds of tapes. But unfortunately, it is only rote repetitions of the taped scripts and songs that begin to emerge from their children, not spontaneous communication. In fact, sometimes the memorized dialogue takes the place of previously learned responses to common questions, about food choices, for example. And when the content of videos is frightening or confusing, as is nearly always the case, the tapes become, paradoxically, magnetic; children clamor to see them repeatedly.

Although it wasn't easy for them initially, Simon's parents managed to set careful limits on what and how much tape he saw and heard. Like other parents who make this change, once the transition was accomplished over a week or two, they noticed that Simon's urgency to watch the tapes disappeared and he seemed less preoccupied and more available.

I had also been encouraging this incredibly child-tolerant family to move him **through** doors, rather than allow him to linger for fifteen minutes to half an hour as he investigated each one. No wonder going anywhere with him had become a nightmare! I suggested that they simply pick him up and go through doorways, talking soothingly yet firmly about where they were going. Within a short time, he stopped the protest tantrums and accepted their direction, often coming along without a pick-up. They were delighted to be able to go places with him again.

Even in psychotherapy, it is vitally important to set comprehensible limits with children like Simon. Otherwise they come to sense that they are viewed as destructive, messy, or wild. They also do not get the feedback they need to move from obliviousness to recognize their impact on others. Thus when Simon stepped on my toes, which happened very often early on, I tried to help him see that he did. Even though it didn't hurt, he was intruding on my space and behaving as though my foot were wood. As his sensory feedback system began to normalize through his work with the occupational therapist, Simon first began to notice my protests, then to heed them.

It is a fundamental responsibility of adults who care for young children to help them learn to behave in socially acceptable ways. Still, it sometimes seems impossible to help an oblivious and driven child to recognize his effect. What to do? First, limit the stimuli, guided by your observations of the particular child. For instance, I quickly noticed that if I left any toys out, Simon would manipulate them randomly for a few seconds, drop them on the floor, and not return to them. I stopped leaving anything out. Second, have a good reason if you tolerate something that would generally be out of bounds. (Praying for the plumbing!) I let, and even joined, Simon in wadding up large amounts of toilet paper with water and plopping them gleefully in the toilet in session after session for several months, just after he was toilet trained at age 3½ or so. I saw the activity as his earliest attempts at symbolization and this capacity grew in interactive significance over time. It is not unrelated that Simon began to symbolize in response to kind but firm toilet training; children progress in symbol-making capacity in response to reasonably placed limits.

On the other hand, once I helped Simon master opening my storm window, quite an accomplishment, I did not allow him to throw balled-up paper out of the window. Simon resisted my resistance, but in those confrontations lurked vigorous interchanges. The issue here was not safety, but rather differences in volitions, and it was imperative for him to meet up with mine, so he could gradually absorb standards of the permissible. Finally, I tried not to let Simon hurt me or break anything. When he did he was faced with a dramatic change in my affect, enough to capture his notice but not enough to frighten him. Of course, over the duration of his treatment, the acceptable limits have shifted in correspondence to changing goals and objectives.

By the time his speech and OT-sensory integration therapies began (two and four months after our treatment began, respectively), I knew Simon rather well. With the addition of each new therapy, I could literally see an increase in his pace of growth across many developental areas. I have similarly been impressed over time with the effect of dietary restrictions based on the sensitivities we noted by using the elimination diet (see Greenspan, 1992, chapter 8). The driven and unfocused quality of Simon's activity diminishes when his diet is followed. When he is at his best now, what was hyper- reactivity and hyperactivity look more like robust eagerness.

Upping the ante

Once Simon had generalized his attachment to his family to include me, and we were discovering the terrain on which he could permit greater affective and gestural interchange, it was time to "up the ante". Whenever possible, I began to linger before reading his stereotyped cues, which consisted mainly of reaching towards something he wanted or, more frequently, pulling the arm of the nearest familiar person towards what he wanted. In other words, when Simon was in a state of high motivation, he was made to work harder to organize and convey his desire. An important component here was to get Simon to attend to the others' separateness, and at times, to our differing intentions.

If, for example, he insistently pulled my arm to open the window, I might decide to scratch my nose first before accommodating. That gesture would bring his attention to my face, one goal. I would delay or play dense only up to, or a little past, what Simon could stand, initially probably less than a second at a time. But this tolerance grew and with it, in tiny increments, so did his relative flexibility. My effort was always to let him see that while I would cooperate, I had my own timetable and volition and, equally important, that he could more and more specifically convey what he wanted. As I came to see his insistent, quickly escalating demandingness both as engagement with me and as an affect he needed to learn to both tolerate and modulate, I became bolder in challenging him. For example, I might clumsily stick my foot in the path of a door he was intent on moving. The numbers of communication circles he could open and close in a row grew correspondingly. I was also relieved to see evidence of Simon's good intelligence, as he would sometimes quite craftily figure out how to get

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me to do something he wanted, a bit like a chess player figuring out several related moves ahead.

During this period we began to work hard to get Simon to notice that we saw what he saw and, although this was much harder still, we tried to help Simon notice what we noticed. This culminated in a period during which Simon noticed every single flying machine overhead, "See 'plane! . . . See 'copter!" he would announce and point. Again the effort was not to get stuck within the limits of his repetitiveness. So, I might respond, always with dramatic expressiveness, "Oh, I no see airplane," or "I see pigeons." I would try to select something which I knew (or hoped) he was on the edge of bearing to focus upon, even while I used broad gestures and tried to help him take in more of me.

Simon became very interested in the keys to my front door, and quickly mastered which was which and the mechanics of getting the door open. We also spent several weeks or more taking turns at ringing the door bell, identifying ourselves on the intercom, and buzzing each other in. Not only was he becoming proficient in the intricacies of an urban office entry system but, far more important, Simon was beginning to internalize my activities and to deal with our frequent separations and reunions. As will be seen presently, Simon later incorporated these fairly circumscribed circles of interaction into far richer play.

A few months later, Simon began to evidence a remarkable capacity to remember certain things, such as the names of printed letters and numbers, and also various subway routes, stop by stop. His family naturally responded to this evidence of his intelligence with delight and investment. They needed tactful, supportive but also authoritative direction not to encourage what easily could have become "idiot savant"-like, prodigious, but decontextualized and, therefore, totally useless knowledge.

I cannot emphasize enough that, in the face of the virtually magnetic desire to memorize and recite which children like Simon often develop on the way to more normal functioning, it is essential to resist the temptation to bolster what could become a rote splinter skill which would compete mightily with the unfolding of what for these children is far more taxing—spontaneous interchange. At that time, it was much easier for Simon to learn and repeat than to respond to constantly changing, novel interactions and circumstances; but it was those very interactive capacities, difficult though they were for him, which dearly needed practice and growth. Simon's propensity to absorb and announce details needed to be hitched to meaning in the real world. With difficulty, his parents came to understand this and managed enormous restraint, accepting Simon's impressive pronouncements with interest but moving him along to something else appropriately, something which demanded interchange from him.

Toward shared meaning

The sunny days of spring magnetized Simon to the outdoors and I decided to try working with him outside rather than confront what I sensed was a latent, but powerful oppositional potential. He became increasingly interested in venturing past the front of my brownstone. We began to recapitulate some of the "stair game" on the stairs and entrances to the neighboring buildings. However, because we were on new terrain, there were novel opportunities and the game became increasingly varied and spontaneous. One variation included my imitating the squeaks and screeches of various doors, which he began to recognize. So after a while if I said, "Let's go screech door", he would know which building I meant, and soon afterwards Simon began to tell me which building he wanted to go to by a "S-C-R-E-E-C-H" or a "squeak". In this way, I began to feel that we were developing a personal, idiosyncratic but expanding interactive language, not unlike what good dyads have between them as one-word-at-a-time begins to emerge at the end of the first year. And, of course, parallel to these developments were similar emerging capacities within his other key relationships.

Somewhat later, Simon began to notice the activities of the mailman, who was usually making his rounds during two of Simon's four weekly appointments. For many weeks we accompanied this kindly gentleman on his rounds; Simon was intrigued with his job, which, of course, consisted of opening and closing many doors, mailboxes and mail slots. He had a fine set of keys and performed his routine in relatively repetitive, stereotyped ways. The mailman's activities and our increasing imitation of his duties, which we began to pretend on a day when he did not show up, became the perfect transition from door activity that was meaningless, to door activity that had increasing meaning, meaning which we both understood, meaning which we shared.

Back in the office, another step forward came when Simon began to represent going on a bus, going up its stairs, putting the coins into the change machine and saying, "hello," to the driver. These representational activities were the full extent of the play; no story could be elaborated at that point, tempting though it was to me. Once, when I tried to challenge him to go further, I got on the "bus" and complained, "Oh! Have no money!" Simon, who could only take me literally then, cheerfully ordered, "Pretend!"

So individual representational elements became an increasingly large repertoire and later on became integrated into more connected and affectively rich interactions. For instance, Simon began to resent the end of the treatment hours. I learned this as he began to dismiss me from sessions as a part of play, telling me that my appointment was over. He played Rebecca and I became Simon. I would grump and fuss, to his delight—affective expressions which were beyond him then and elude him yet. This play became elaborated as he would sit at my desk, pretend to be me, writing and stapling. When I (Simon) returned, he (Rebecca) would buzz me in the front door with great glee. You see once more a derivative of door play which utilizes the later "buzzing in" sequence. You also see Simon enthusiastically working on his internal representation (of me, in this instance), while he labored to finally get his personal pronouns, which had been reversed for months, accurate.

At around this time, Simon finally began to use the toys, at first in a bowling type game we developed together. This play had no connection to doors (at last!) and it was heavy on turn-taking, waiting one's turn, and noticing both visually and auditorally what each of us did. Equally important, these were shared sequences which were built up and developed between us and some of the joy was in the shared interaction and mutuality of elaboration. I admired his action-ideas and he began to notice and appreciate mine.

I described a recent session about a sheep, a lamb and a cow early in this report. Here is an excerpt from a message left on my answering machine a day later, by the special teacher at his nursery school. In it, you will note how Simon carries themes from place to place immediately (but sometimes still too repetitively and concretely) and how he tends to utilize and apply his experiences:

> ***Today Simon and Sabrina were partners on the way to the park. He started to say to me "I'm a sheep, Baa! baa!" He latched onto Sabrina and told her clearly, "You be Bo Peep, and I'll be the sheep. I'll pretend to be lost and you try to find me and feed me.***
>
> ***. . . She totally got into it. They dashed around the park, climbed the brick wall and up the slides . . . for at least twenty-five minutes. He'd even stop, make a few variations, remind her of the rules: that he was to be lost, and she had to find him. Eventually Sabrina grew tired of his ideas and wanted to make changes. He went along with her wishes, listening to her ideas and following her directions. He was also able to shift gears back and forth between taking directions and giving them.***

These are examples of Simon's dawning ability to make connections between affect-laden ideas. His play demonstrates emotional thinking, even given the relatively heavy demands made by social interaction and large motor activity. Further, Simon was able to follow, not just lead (demand), and to vary in connection with another child. These developments are, no doubt, related to a recent addition to his intervention program: in order to help him attend to the more erratic, fast, action-oriented messages of children and to generalize his growing communication capacities his language therapist began to see him at home with his brother and in school with a classmate.

Remaining challenges in Simon's development and for his treatment

In addition to the transition to kindergarten in a regular elementary school, many continuing challenges confront Simon. He tends to be concrete, rather than imaginative and resourceful. In recent months, he has occasionally evidenced stress through blinking, nose-picking and playing in a more "driven" way than has been usual. These regressive manifestations have all been transitory, but in them we glimpse his constitutional vulnerabilities and tendency to hyperactivity which are usually kept in check by his diet and limitations on stimulation or stress.

Predictably, given his history (which includes the intensive treatment plan!), Simon is also very self-centered. He does not like to be alone. It is difficult for him to pay attention to and cope with the volition of others if it contradicts his own. Simon tends to focus on the pleasant as a defense. He may fleetingly touch on a painful area, but then will latch onto something slightly perseverative or something pleasant. This pattern is not unlike his father's characterologic style and is therefore likely to be tenacious. An illustration:

> ***Simon recently came into a session, pointed to a bandage on his knee, and announced that he had fallen in school. I responded with restrained sympathy and interest. He answered my first question about where the incident had occurred, but when I tried to get him to tell me a few more details about it, he smiled, jumped out of his chair, and said, "Let's play bats," a game which, by now, has become very familiar and repetitive to both of us.***

We can see a clear relationship between this current defensive posture and his initial reliance on repetitive activity (with doors) as a defense against overstimulating sensory inputs. It is also easier for Simon to move on to something else than to exercise his incipient but still relatively poor capacity to produce language about something painful that happened in the past. These, however, are characterologic problems with some continuing constitutional vulnerability, a long distance from Simon's earlier diagnosis.

Therapeutic planning is now geared to help Simon experience and cope with a variety of feelings and to get the upper levels of his capacities more consistently available and better integrated with each other. For example, I hope that his representational activities will more reliably become rich, symbolic play which includes a wide range of affects and themes. Simon does continue to have language processing and production challenges. However, he is unusually interested in pleasing the adults around him and he is therefore motivated to notice our questions, requests and demands. His age-appropriate reading readiness and math-readiness skills (now quite well-integrated strengths, rather than the extraordinary but isolated skills he had been in danger of developing) will also serve him as he moves into school, although we will continue his special teacher to help him through the transition. He needs to make up for lost time by working through the self-centered, dependent and "hungry" position; by improving his cognizance of others and his receptive language skills; by internalizing conflicts increasingly so that they provide fuel for an affectively rich and symbolic inner life; and by developing self-observing functions.

Essential elements in Simon's progress

Two years and two months into treatment, Simon is a warm, animated and eager youngster who speaks in full sentences. His language and cognitive strides, his affective vivacity, his widening interests, his relatedness to important people in his life, and his increasing social skills are heartening. His uniquely dedicated and organized parents, who were themselves bolstered by their extended family and Simon's good functioning in certain key areas—in particular his motor and eye-hand coordination capacities and, (as became evident over time), his intelligence—were real strengths. But in more exaggerated ways than in normally developing children. Simon's growth did not go forward in a straight line. There were long plateaus and some backsliding; when slippage occurred it seemed to take Simon over with frightening completeness and speed. We had to identify quickly what was overloading him; once we learned to do this, it was usually easy to figure out what to do in terms of modifying his diet or the level of environmental stimulation. It is worth noting that this kind of experience can, with adult assistance, develop a child's own self-monitoring skills; Simon already knows that certain foods make him "a little wild" and he seeks out alternatives.

The reader may well ask, "What happened to Simon, given that his development looked essentially average (as verified by careful history taking, photos and viewing of homemade videotapes) in the first year to eighteen or so months?" Our working understanding is that his constitutional vulnerabilities undermined solid achievement even of early social, emotional and communicative milestones; and, further, as functional challenges increased in the second year, Simon's sensory and language processing capacities were too fragile to keep up the heavy pace required to integrate normal unfolding across various lines of development (A. Freud, 1965) and by his vigorous, sociable family. He not only stopped progressing along a number of lines, but it also appears that as higher level processing was required, his perceptions of the outer world were fielded through an increasingly obstructive system. Integration of incoming perceptions became impossible and with this constant overload came perseverative attempts to protect himself. Simon not only stopped progressing in most areas besides large and small motor capacities, but he also had lost a range of recently achieved landmarks by the time we met him.

Children like Simon get hit with a "double whammy" because as they rapidly lose their abilities to perceive and negotiate their environment, they concurrently become unable to elicit what they need from their key caregivers. For example, to Simon's parents, his fascination with doors seemed like one of the few remaining interests he had. So, rather than trying to stay contingent emotionally and gradually help him to expand his range of focus, they unwittingly fostered his perseverative, unconnected concentration on doors by letting him become absorbed with them while they stood by watching. Given that sensory and processing systems are invisible unless one is trained to know what to look for, it is inconceivable that parents of such children would discover by themselves what could work to help their child grow.

It is essential to acknowledge to parents that it would be close to impossible for them to figure out their child on their own—what works to calm and focus most children does not work with these children. Worse, what worked a few months or even weeks earlier with such children no longer works. As their children become increasingly constricted in their tolerance of variation and stimuli, and more and more insistent on sameness and repetition, most parents find themselves inexplicably locked out of genuine interaction with their child. When their child does approach them they are increasingly commanded to function as an extension of the child's immediate and frequently repetitive desires, with threats of rapid escalation to tantrums always looming.

In my work with Simon, I needed the optimism and energy to join and challenge him, gradually making him work harder to organize and convey signals about what he wanted and needed. It's much more active work than the interpretive and play-symbolic interventions I had learned in my training. It is also necessary to be authentic and affectively responsive to such a child. Indeed, as it went along his treatment required that I let him see a flash of anger now and then. Similarly, when, several months ago, Simon knocked me for a loop by asking, "Why I come here?" and before I could form a reply, turned his deep blue eyes softly at me and answered himself by saying, "Because I love you," it was important, I think, for Simon to see and feel my gratified, loving responsiveness.

The keys to Simon's rapid progress are:

- An appropriate, stage-specific but observationally based assessment which goes beyond diagnosis and the commonly practiced, cross-sectional, test-based elaboration of vulnerabilities to an evolving, integrated evaluation of strengths. This approach encourages interventionists to "play to," and help a child expand and generalize, his best levels of function
- A fundamental belief in interactive relationships as keys to human unfolding and organization
- Recognition that in that unfolding, regulation, and organization, none of the stages or processes can be skipped
- Recognition, further, that, to promote growth, the child's initiative must be treasured, followed, entered, shared, modified, and built upon
- A devotion to the incremental building of shared meanings and pleasures
- The contributions of allied therapies and perspectives, specifically, in this case, those coming from speech/language pathology, occupational therapy, and early childhood education, and unrestrained use of those approaches
- Regular and frequent team sharing of insights and strategies so that parents and all therapists could

consciously use and expand relational opportunities

- Regular opportunities to interact with normally developing children
- Careful attention to dietary and environmental factors; it makes sense that many children who are uniquely reactive to outer stimuli would be similarly sensitive to ingested substances
- Removal of exposure to repetitive media, especially videotapes and TV
- Judicious limit setting
- Finally, but of the most fundamental significance, work with parent and child **together** to help parents remain central referents and integrators, alert and tuned into their child's changing needs during this period of mushrooming growth.

Simon's entire family has been exceptionally dedicated to him and to our collaboration. His mother, especially, has managed the details of his treatments and diet in ways that supported Simon's (and the team's!) stability, organization and development. The team is crucial in such a case, partner detectives always investigating and building upon the current picture. Each of us needed to be open to suggestions and observations made by the others as Simon progressed and as he lapsed.

In this material I have tried to convey our essential dedication to the building of affectively-engaged, vigorous, interactive human relationships which flowed from Simon's initiative and gradually shifted to more and more complex demands and invitations as he became more capable. In working with delayed young children, knowledge and experience with infants, toddlers and parents is crucial. I was helpful in detecting an organizing way of working with Simon given a clear cognitive and experiential template in both my mind and my soul of what is required between a normally developing baby and his key caregiver. A "sense of personhood", as Greenspan has called it, (1992, p. 653; also this issue) evolves through relationship. This relationship itself must shift as child and key caregivers contingently move through complementary and increasingly differentiated stages.

References

Freud, A. 1965. *Normality and Pathology in Childhood: Assessments of Development,* Writings of Anna Freud, Vol. 6. New York: International Universities Press.

Greenspan, SI. 1992. *Infancy and Early Childhood,* Madison CT: International Universities Press Inc.

Stern, D. 1977. *The first relationship: Infant and mother,* Cambridge MA: Harvard University Press.

Calls for proposals:

The Michigan Association for Infant Mental Health invites workshop proposals to be presented at its 17th Annual Conference, which will be held in Ann Arbor, Michigan April 25-27, 1993, with the theme "The Diversity of Infant Experience: Awareness and Action." ***Proposals must be received by Friday, December 11, 1992.*** For an application or to be on the mailing list, contact University of Michigan, Conferences and Seminars, 541 Thompson Street, Room 112, Ann Arbor, MI 48104-1360, tel: (313) 764-5305, FAX: (313) 764-2990.

The Administration on Children Youth and Families (DHHS) in collaboration with the **Society for Research in Child Development** and the **National Council of Jewish Women Center for the Child** invites proposals for presentations at the 2nd National Head Start Research Conference, to be held November 4-7, 1993 in Washington, D.C. on the theme, "Translating Research into Practice: Implications for Serving Families with Young Children." ***Abstracts must be postmarked by January 29, 1993.*** For submission guidelines contact Faith Parker, NCJW Center for the Child, 53 West 23rd Street, New York, NY 10010, tel: (212) 645-404, FAX: (212) 645 7466.

Munksgaard International Publishers, in association with the **Norwegian Centre for Child Research**, will begin publication of *Childhood: A Global Journal of Child Research* in February, 1993. Studies are welcomed "from the widest possible variety of geographical, social and cultural settings." However, only original papers written in English will be considered. A brochure with ordering information and instructions to authors is available from *Childhood,* Regional Office for North America, Munksgaard International Publishers Ltd., Three Cambridge Center, Suite 208, Cambridge, MA 02142.