

Alternatives to Behaviorism



Stanley Greenspan, MD, demonstrates the superiority of relationship-based approaches to Early Intervention

Is autism/PDD a "thing" a person "has"? Can you cure it by training a child to "act normal"? Should early intervention focus on teaching compliance, or is there a more crucial and appropriate goal to aim for?

In an extraordinary day-long workshop sponsored by the Good Shepherd Rehabilitation Hospital of Allentown and Lehigh County Early Intervention Services on April 7, 1995, Stanley I. Greenspan, M.D., Clinical Professor of Psychiatry, Behavioral Sciences and Pediatrics at George Washington University Medical Center, offered a thoughtful and coherent rethinking of our approach to early intervention for the child with developmental delays and disorders. The large assembly of parents and caregivers was delighted to hear Dr. Greenspan's optimistic assessment of these children's potential for emotional and social growth, provided that we can offer them intensive, relationship-based alternatives to the rigidity and developmental inappropriateness of behaviorist interventions.

Greenspan's model of autism/ Pervasive Developmental Disorder (which he prefers to call "multisystem developmental disorder") is thoroughly developmental. He faults most interventions for zeroing in on the initial problem area observed during diagnosis -- motor, sensory, behavioral, language, etc. -- rather than conceiving the child's challenge in terms of a broad set of developmental processes across all areas.

While most current practices tend to focus on the supposed nature of the problem, and less often on the issue of nurture, Greenspan finds the nature vs. nurture debate to be a misstatement of what a developmental model implies. He reminds us that each infant brings physical differences, while each caregiver brings both an interactive style as well as a larger context of family and environmental patterns to the interaction. The child's mastery of developmental challenges becomes an outgrowth of these interactions: it is not preordained by the physical differences, nor is it due to the caregiving, familial and cultural patterns. Rather, it plays out over time in a unique and specific context.

Successful interventions must work to recognize and synchronize the patterns of these systems so that optimal interactions can occur. Clearly such intervention cannot be a "one size fits all" approach, and clearly it must build child-family relationship rather than child-professional relationship.

Greenspan offered a number of ways to think about a child's physical differences. Is his sensory system over- or under-reactive to touch, sight, hearing, and all of the various modalities? Is she able to process, to find patterns, in these various modalities? (Secondary cognitive delays may occur because the child cannot comprehend these patterns.) How is his motor tone? Is he able to carry out motor planning and sequencing? With ease, or can we already tell that the more complex motor patterns needed for social interactions are not on "automatic pilot"? As we find answers to these questions, we must proceed to ask how this child's environment can best support interrelation, engagement, and sensory regulation. If the child is not helped to find manageable, rewarding interactions, he or she will begin to "shut down" the baffling environmental input and a form of self-imposed sensory deprivation will begin to set in.

An infant's development proceeds by well-recognized stages. The typical newborn learns to regulate its sensory system and shows interest in the world. A stage of attachment/relationship, which involves synchronous motor movements, is reached by about five months, followed by the development of intentional two- way communication by approximately nine months of age.

At about 13-18 months, we should begin to see the emergence of a complex sense of self, manifested by the infant's attempts to organize complex emotion and behavior to convey a distinct intention or need. In an early diagnosis of autism/PDD, the first sign of trouble is often that this stage is missing. For example, instead of signaling to Mommy that she wants to have the toy or cookie that's out of reach, the child may withdraw, become perseverative, or tantrum while the parent searches desperately for the unconveyed reason. In most children, synchronous patterns of movement support this early communicative engagement with their caretaker, but in children developing the autism/PDD syndrome this meaningful flow of movement will be absent. These early markers of a serious developmental problem can usually be observed, and intervention work begun, by 14-15 months.

Observation of movement in these children is very important. To distinguish language delay from PDD, the observer should ask how the baby is communicating without language: that is, whether the use of gestures, body language, and other nonverbal communication is appropriate. If the child seems "late" with speech, using only single words but using them intentionally, development may well be on target. Some children may delay in using full sentences because their needs are already being met.

Once a child develops a complex sense of self he can go on to develop emotional ideas, in particular the ability to connect his ideas and feelings to those of others. The child at this stage, which usually takes place around 24-30 months, can create mental images of emotional ideas, and this ability opens up an elaborate world of pretend play. (When this ability is lacking in children with autism/PDD, it is sometimes said that they lack a "Theory of Mind." In Greenspan's developmental scheme, this represents an as-yet unattained stage rather than an innate deficiency.)

In observing the interactions of the young child at this stage, Greenspan asks us to observe how the child is able to access, convey and use emotional themes such as love, anger, fear, or jealousy. For example, a child may be able to make broad use of the idea of love (a "robust pattern") but may only be able to act out anger or fear in the form of aggression (a "constricted pattern"). The observer should also note to what extent there is sensory, motor, language and cognitive support for each thematic pattern.

You don't have to do standardized testing to evaluate these youngsters, Greenspan insists: 30 seconds of observing a healthy caretaker-child dyad is enough to tell you the child is okay. If problems are suspected, observations should be made more than once in more than one setting, and especially in the home. Taking the family history and listening to parents is of great importance, since developmental data are vital. Formal testing, Greenspan warns, is a final step to be done only if needed, and should not be used as a screening technique.

Finally, if there is a discrepancy between what the parents say about the child and what the observer sees, this needs investigation. In order to intervene productively, parents and professionals must come to a shared view of the child. Greenspan urges early intervention providers to listen carefully to families' concerns. "Families rarely come (for help) who don't require it," he observes, "so don't waste time guarding the door."

Greenspan's model of infant development suggests that the glue which holds the other developmental pieces together is affect, or emotions. The infant starts out with undifferentiated affect, and the normal affect system has virtually infinite variety within any domain (i.e. there are many levels of happiness, of rage, etc.). What separates us from the animal kingdom, Greenspan believes, is not language but this range of affect.

The range and variety of human affect is what makes it such a good glue for the rest of the developmental processes. Although it is sometimes represented as a detriment to logic and clear thinking, in reality affect is critical for intellectual and social development. All abstract concepts have emotional content: in fact, abstract concepts cannot be attained without emotion, since they represent categorizations of lived emotional experiences. We can't even

understand space and number, Greenspan explains, without an emotional feel for quantity, for more and less. Those children who are good in math are those who can estimate, who have a "feel" for numbers, and such children go further than those who can only do math by rote.

Every sensory experience early in life (e.g., rough and smooth, hard and soft) is coded in two ways: it is abstracted, and it is exposed to systems of formal logic, or systematized, which is why we say that the best thinkers can both intuit and contextualize. Flexible, adaptive skills depend on affect cuing, the stuff of our intuition, and are very different from rote skills. For example, affect controls social behavior as we learn to say "hello" to those who feel warm and friendly and not to respond to strangers who feel cold. If we try to introduce someone with autism/PDD to these interactions by giving them an intellectualized set of rules about when to say "hello," their task and ours will be nearly impossible in the absence of the needed affect cuing. This illustrates, insists Greenspan, the absolute necessity of giving people with autism/PDD real-life interactions, over and over if necessary, so that learning can occur. These children can only benefit from early intervention, inclusive schools, and other experiences by interacting, not by "listening and learning."

Another critical element in Greenspan's model is the child's developing sense of personhood, or self. Often when we deal with challenged children, Greenspan reflects, we forget we're dealing with a person who is evolving a sense of self: a self with desires that get pictured, an intentional self. Without being an intentional self, the child cannot give meaning to language. This aspect of child development has been passed over by many theorists such as Piaget, whom Greenspan critiques for failing to understand the affective nature of cognition. (It is also worth noting that the concept of the self doesn't exist for the behaviorists.)

Greenspan strongly critiqued the current diagnostic model and intervention strategies, which he characterized as a group model based on the presumed characteristics shared by the autism/PDD group. He noted that Dr. Leo Kanner, who "discovered" the autism syndrome in the 1940s, was wrong in this primary supposition: these children do not shut out the world from the very beginning, although subtle motor planning problems may be observed early on. Greenspan feels that the current diagnostic guide, the DSM-IV, perpetuates Kanner's error, reifying developmental stages as if they were conditions present from birth.

The strength of Greenspan's "Developmental/Individual Difference Model" is that it is not based on membership in a presumed group, such as PDD. Rather, it is based on an analysis of where in the normal sequence of development the individual child went off the track and on crafting a strategy for getting development back on track based on the child's individual differences, the familial and cultural patterns of the child's environment, and how they can best interact.

Children diagnosed with autism/PDD have severe constitutional/ regulatory problems which cause severe problems in relating and communications. It is presumed that such children cannot master various maturational levels without intense intervention. Those children with less severe physical disorders that contribute less intensely to interactive problems are classified as having regulatory disorders. Finally, there is a group of children who initially present with serious interactive problems, but whose problems turn out to involve only the environment rather than constitutional problems experienced by the child (e.g. cases of failure to thrive or trauma due to drug problems in the home).

Greenspan classifies the regulatory disorders into five main patterns: 1. the hypersensitive, fearful child who tends to overreact and needs a safe, quiet environment; 2. the hypersensitive, stubborn and defiant child who has an enormous need to control because she is extremely overstimulated; 3. the hyporeactive, pain-insensitive child who may appear aggressive due to his intense craving behavior; 4. the self-absorbed, underreactive child with low motor tone and low activity level who needs both reality checks and energizing; and 5. the child with motor planning problems, who is often labeled ADHD because of her inattentive appearance.

In the PDD child these patterns are far more intense, to the extent that relatedness and communication break down. Greenspan finds that motor planning, sensory modulation, and often auditory processing problems are the core of this disorder, while the manifestations of withdrawal (echolalia, self-absorption, perseveration, self-injury, and so forth) are secondary, acquired symptoms.

In successfully intervening with such a child, it is necessary to first determine where the child is developmentally and what each particular processing problem is contributing. Greenspan warns us not to skip steps on the developmental ladder, and to avoid the temptation of working above the child developmentally (e.g. honing the so-called "splinter skills" in the absence of a developmental context for their appropriate use). Rather than training a child to speak a word or two on cue or to regurgitate memorized verbal formulas, Greenspan suggests that we first work on the child's gestural system, and let language come in spontaneously. This is the only way to develop speech which is responsive, cued to affect and not to an artificial prompt.

The typical Greenspan intervention revolves around a concept he calls "floor time" -- time which the caregivers, generally the parents, spend entering the child's activities and following the child's lead. If the child wants to line up cars in a row or twirl a top, the parents will join the child in his or her preferred activity (with the intent of developing this action into an affective interaction) rather than demanding that the child join them in their preferred activity (a process which, at best, will produce no more than rote action and reaction).

Starting with this mutual, shared engagement, the parents are assisted to draw the child into increasingly more complex interactions, a process known as "opening and closing circles of communication." For example, the parent may begin to take turns with the child who is lining up his cars, until the child begins to expect and wait for his parent's turn. Then, the parent may "accidentally" place a car in the wrong spot, tempting the child to open and close a circle of communication as he corrects this appalling error.

Of course, the larger and very serious game being played by the parent is to turn even what looks like random behavior into intentional acts that get a specific response, and thereby become the means of nudging the child's crucial affective development back on track.

Greenspan also reminds us that these children need to have caregivers describe new situations for them, preparing them beforehand and rehearsing to help them anticipate what is expected. They need the adults in their lives to empathize with their reality and to shape their behavior in small, manageable steps. Caregivers are encouraged to be firm on limits, but to avoid making a confusing number of rules. Finally, they are reminded that when limits must be increased, "floor time" must also be increased so that life doesn't degenerate into a power struggle. "Floor time" should also be increased whenever regression is observed.

Drawing on his vast clinical experience, Greenspan finds that as much as 50% of the group presenting with severe relationship, communication, motor, sensory and cognitive difficulties -- that group typically labeled with autism/PDD -- is actually "ready to take off." With appropriate relationship-based therapy this group will respond with surprising speed to play, will become joyful, and will learn to cue off their own affect rather than off artificial prompts or rewards.

Another group within this diagnostic range is generally more challenging and avoidant, and for this group motor planning problems seem to be severe. For these children the "opening and closing of circles of communication" must be sought in a manner that is more insistently "blocking" and "obstructive" as the parent intrudes interactions into the child's solitary play activities. Children in this group do go up the developmental ladder, but tend not to get as far. Families need more support as they work with their children's slower developmental processes, or they may become demoralized. More structured approaches, such as rote work to get a new skill going, may need to be combined with "floor time." If the child can demonstrate the practiced skill in flexible play, we know they own it. Interestingly, this is the group with which controversial therapist Ivar Lovaas, PhD, admits he has the most problems and the least success with his behavioral approach, while the "ready to go" group is where his -- and indeed, most therapists' -- success stories cluster.

Greenspan suggests the same general approach for children diagnosed as mentally retarded. Here again, group membership in this label is not helpful because such children are very different from one another. The old notion that MR meant "global delays," insists Greenspan, is simply not true. While there may be some delays in all areas, some will predominate while others are less of an issue. Greenspan observes that the typical programs for this population tend to reinforce the difficulty rather than move these children on to the next level. While the brain continues the process of myelinization (growing new nerve cell connections and networks) until we are 45-50 years old, on the basis of an MR label we stop challenging people toward independent thinking, stop offering them choice and control. "Developmental delay" becomes a self-fulfilling prophecy.

Greenspan reminds us that processing delays do not equal a central reasoning deficit. The child's learning curve over time, rather than a cross-sectional assessment done by formal testing, is our best predictor of outcomes. Assume the best, he encourages, and don't assume a ceiling.

Two major mistakes are frequently made in early intervention, Greenspan believes: 1. taking a minimalist approach which does not provide the family enough team support; and 2. overlooking family dynamics to such a degree that early intervention becomes, not a support to the family, but another source of familial stress. Intervention must consider the well-being of the family as paramount, and avoid the temptation of viewing the child as if he or she existed in isolation.

Greenspan concluded his optimistic and well-documented presentation with a challenge to parents and providers: it is an expensive proposition, but good, intensive alternatives to behaviorism must be provided.

Stanley I. Greenspan, M.D. has made research into a framework for the emotional milestones of development his life's work. The results of his research have been incorporated into the developmental component of the American Academy of Pediatrics' Guidelines for the well-baby exam. He is the author of more than twenty books and 100 articles, including the classic *Infancy and Early Childhood*, the definitive text for the diagnosis and treatment of emotional and developmental disorders of infants and children. His work has been featured in the PBS NOVA documentary, "Life's First Feelings," and in two video tapes for educators and parents entitled "Exploring First Feelings" and "Floor Time," one of which is being shown to new mothers in over 200 hospitals. Dr. Greenspan's recent book, *The Challenging Child*, deals with the patterns of the various childhood regulatory disorders.