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Clinical Developmental Theory: A Quick Guide to Dr. Greespan's DIR Model

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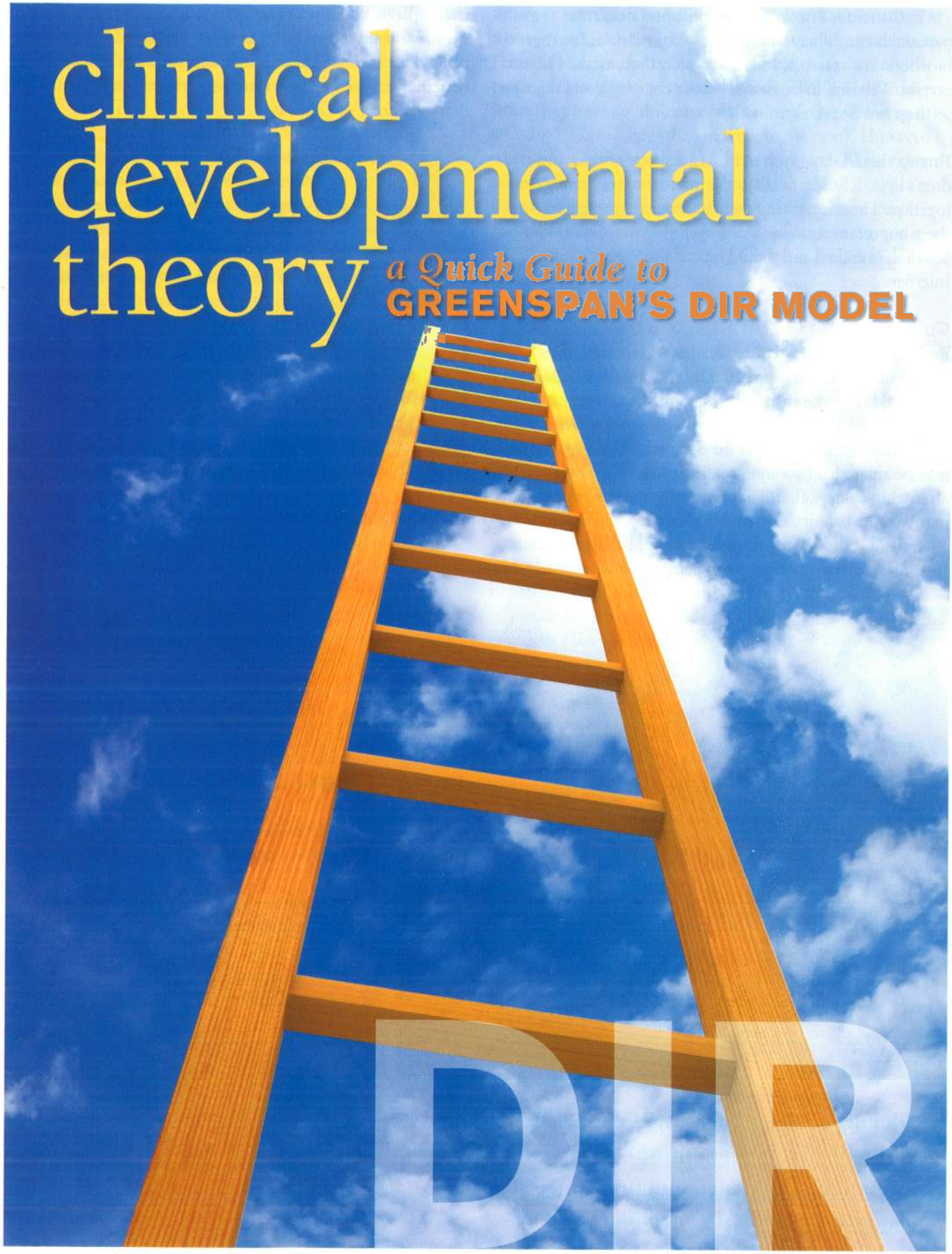
a Quick Guide to GREENSPAN'S DIR MODEL





"When I was a child, I talked like a child, I thought like a child, I reasoned like a child. When I became a man, I put the ways of childhood behind me" (1 Corinthians 13:11; NIV).

Two loving parents bring their eight-year-old son, Johnny, to therapy because he has been struggling with temper tantrums that apparently come out-of-the blue. He was diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) when he was five and his explosive anger has become increasingly out-of-control and dangerous.

Jackie is a 45-year-old white female referred by her family doctor. She reports having been depressed almost her entire life, beginning at about age 12. Jackie has seen multiple therapists over the years and has also been prescribed numerous antidepressant medications, but nothing seems to help. In therapy, Jackie would hardly make eye-contact, frequently complained that therapy was not going to help, changed topics frequently, and was often very passive and withdrawn in the sessions. Her counselor felt helpless and asked for a consultation.

Mary is a 42-year-old African-American female who was also referred by her family physician for therapy. She had become depressed about six weeks prior to the referral after changing jobs. Mary had received a negative work evaluation and was having difficulty "dealing with all the pressure to perform." Though depressed, Mary was able to focus in therapy; she answered questions appropriately and stayed on topic. She was able to participate in a collaborative psycho-educational process with the counselor as she helped Mary understand the nature of depression. Quickly, she learned how to engage in self-monitoring, completed her daily mood logs, and was willing to participate in personal evaluations designed to test out the veracity of her negative, automatic thoughts. Mary subsequently discovered a core belief about her performance perfectionism and, with the help of the counselor, learned how to revise this belief with a more balanced and biblically grounded view of her self-worth. After only 12 sessions, Mary was in full-recovery and ready to terminate therapy. Three months later, she checked back in with her counselor and was still doing very well and adjusting to her new job.

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How do we make sense of what needs to be accomplished in therapy? Why is it that some people respond so quickly to therapy, whereas others do not seem to be able to fully engage in the treatment process? According to the late Stanley Greenspan, a clinical professor of psychiatry at George Washington University Medical School and known for his work with child autistic spectrum disorders, the answer lies, at least in part, in how well a person has mastered certain developmentally-based, functional-emotional capacities which are the focus of his DIR (Developmental, Individual-difference, Relationship-based) Model (Greenspan, 1997; Greenspan & Greenspan, 2003).

The DIR Model

In order to assess and address these tasks, Greenspan created a social-emotional road map (DIR Model) to help clinicians determine how far up the developmental ladder a child or adult is functioning in a variety of interpersonal situations and contexts across the emotional spectrum. The assessment entails evaluating three interrelated areas of functioning:

D = Functional Emotional Developmental Level (FEDL): This construct refers to a person's patterns of thinking, feeling, behaving, relating and communicating… all in a goal-directed, collaborative fashion. The key is to see how well all of these abilities operate together, instead of just how well each capacity functions in isolation. This is similar to evaluating a basketball team. The success of the team is more of a function of how well all the players perform together rather than how well any one player executes in isolation. Likewise, some people have highly developed skills in specific areas (we call these "splinter skills"), but simultaneously have more poorly developed skills in others. This can lead to an overestimation of the person's global functioning. For example, some kids are very verbal (demonstrating high word and factual knowledge), but they have poorly developed abilities to engage others at an emotional level and label and verbalize their own emotional states. As a result, they can be extremely impulsive or rigid and inflexible—some are both, as in the case of Johnny.

Greenspan's model is a structural-developmental one, which means there are optimal times for learning a developmental task. When the task is not mastered, it tends to negatively affect the ability to learn subsequent development tasks. This can create a cascade effect across broader developmental abilities.

I = Individual Differences: The second level in the model refers to an individual's patterns of sensory modulation, sensory processing, and motor planning and sequencing skills. *Sensory modulation* has to do with how sensitive an individual is to different kinds of sensory information (e.g., does a child get overwhelmed by too much noise and then withdraw or act-out?), whereas *sensory processing* refers to how well a person processes (i.e., encodes, decodes, recalls and integrates) information from the different sensory pathways (e.g., can a person listen—auditory—and look at a complex PowerPoint—visual—at the same time?). Motor planning and sequencing are very important for learning how to interact and deal with the physical environment and for learning how to engage in goal-directed problem solving. Individual differences in these areas can affect how well a person is able to master the different functional, developmental levels.

R = Relationship-based Interactions: The final level describes interactions that help create relational contexts, thereby providing a balance of both support and challenge to help clients expand and strengthen their development level. The key here is that the relationship plays a crucial role in adjusting the kind of challenge individuals need to foster new developmental capacities.

Four Tasks of Development (D)

According to Greenspan, high functioning in four key social-emotional capacities (D) is related to sensitive and purposeful awareness of individual differences (I), and the quality of relational attachment and affective interaction (R). Each of these three areas of the model will be discussed briefly, starting with the four tasks of development (D).

TASK ONE: *Regulation and shared attention; engagement with warmth, trust and intimacy (begins to develop between birth and 3-5 months)*

The first task in healthy social-emotional development entails engaging with the world through all of the senses (i.e., vision, hearing, touch, motor activity), while remaining calm and using the caregiver for co-regulation. With the ability to regulate and attend, the child is free to securely interact with his or her world.

When assessing a child, the questions to consider at this level include whether or not the child is having normal rhythms, like sleeping and eating regularly, and is able to engage the surrounding environment in a multi-sensory way? Additionally, can the child become regulated without getting overwhelmed? Evidence of problems here will be seen in the form of dysregulation, hyper-arousal and detachment.

Both Johnny and Jackie had some problems at this most basic developmental level. For Johnny, he became easily overwhelmed by his environment. The counselor would need to help his parents learn ways of engaging their son without overstimulating him and work on creating more structure and predictability in day-to-day life. As for Jackie, she was underwhelmed and disengaged from her environment. Her therapist would have to work at engaging her, rather than talking at her and trying to educate her about her disorder. Even though Jackie was an adult, on the social-emotional domain, she operated more like a young child. This is quite common for those struggling with chronic, refractory (nonresponsive), early onset depression (McCullough, 2010).

TASK TWO: *Two-way purposeful, gestural communication; interactive, shared problem solving through the use of gestures in a continuous flow (begins at around 3-6 months and continues through toddlerhood)*

The second task involves engaging in enjoyable, emotionally charged interactions that promote a sense of attachment. This relatedness is crucial for every aspect of development and motivates the child to attend and explore the world securely. It is here, at this level, that attachment models are being formed, where we see a child using the caregiver as a secure base while communicating physical needs and wants at the behavioral level. A constant interactive dance of collaborative problem solving occurs at the gestural level (i.e., a 16-month-old child might grab a parent's hand and take them to the refrigerator or point to a toy they want). This is where we learn to accurately read and understand the emotional, nonverbal expression of others; it is also where empathy begins to develop, as well as a more complex sense of self and others that is understood at an implicit level.

When there are problems here, they are often expressed in various ways—kids who are explosive, have emotional meltdowns, or a hard time tapping into two-way communication with their caregivers. Limitations with this skill increase the difficulty in clearly communicating needs, wants and desires. For Jackie and others with chronic depression, this is often a core problem. Without the ability to engage in back-and-forth, two-way communication, most traditional forms of counseling and psychotherapy are rendered virtually powerless. These clients are referred to as "pre-therapy" clients and a developmental theory is needed to help understand how to "go back and get them" (developmentally speaking) so they can begin to participate and benefit from helping relationships.

TASK THREE: *The elaboration of emotional ideas (2-3.5 years)*

During the third task, the emergence of language takes place

in what is called "representational thinking." This is when a child is able to use words to replace behavior. Instead of grabbing a parent's finger and going to the refrigerator, the child will say "hungry," "thirsty," and use other words and short phrases to express internal states. Children at this level are now able to elaborate more fully on the range of feelings, wants, and needs that they have, which contributes significantly to the development of impulse control. If children cannot use language to express how they feel, they will use behavior. For example, advanced language might be a child saying he or she is angry and wants to punch someone instead of actually enacting that feeling. For Johnny, this ability is clearly lacking. What he feels he immediately converts to behavior, with virtually no reflection.

This is also quite a problem for Jackie, as she is unable to find words to describe her inner experience and has very little, if any, idea of how her behavior affects others (e.g., how others feel when she does not look at them when she talks, or when she changes topics and fails to answer questions, or when she doesn't register other people's thoughts and feelings). In Jackie's case, the ability to complete self-monitoring assignments hinges on the capacity to reflect on what she thinks or feels in any given situation. Also, the ability to engage in effective social problem solving and use assertiveness requires that one is able to know what he or she wants or needs.

TASK FOUR: *Building bridges between ideas, emotional thinking and more advanced problem solving (3.5 through adulthood)*

The next level involves what Greenspan calls "emotional thinking." This is the ability to know not only what one feels, but also why he or she feels that way. Doing this successfully requires proficiency in the other three levels. Mary was clearly able to engage and focus, participate in two-way communication, label internal experiences, and link these experiences together. As a result, developing an effective therapeutic alliance was not difficult and she was able to immediately benefit from self-monitoring assignments and reflect on how her performance perfectionism was not only self-defeating, but also inconsistent with how Scripture portrays God's relationship with her. In other words, Mary was clearly "therapy ready."

To operate well at this level, people need to engage in all the other skills (e.g., regulate and tolerate negative emotion; engage in two-way, goal-directed emotional and gestural signaling; and represent internal experiences with language and other forms of symbolic expression like play) and link ideas together in more complex ways. So instead of simply saying, "I'm mad" or "I'm sad," a person is able to know why he or she is feeling that way. "I'm mad because Sally took my toy." For an adult, it might be, "I'm angry because my husband doesn't find time for me but he finds time for fishing and golf." At more advanced levels, a person is able to think more flexibly, seeing the world in shades of gray rather than all-or-nothing, black-and-white, I-win-you-lose fashion.

Many clinicians mistakenly assume that when clients come to therapy, they have successfully progressed up the developmental ladder in all of these areas. However, research and clinical experience reveal that many clients have restrictions in one or more of these functional-emotional capacities. Extremely intelligent people often have difficulty putting certain feelings into words and act out their internal experience instead. Both Johnny and Jackie had constrictions in all the developmental areas that have been discussed and needed help acquiring critical developmental skills.

Individual Differences (I)

The second aspect of the DIR Model pertains to individual differences. When people have difficulty in sensory modulation, sensory processing or motor planning and sequencing, it can adversely influence their ability to master the developmental social-emotional milestones. People differ in their sensory processing in terms of how balanced they feel, how aware they are of experiences in their bodies, how sensitive they are to touch, and their overall ability to modulate sensory input. Some are under or overreactive in response to input from their sense of sight, sound, smell or taste, or they have trouble modulating that input. Others are challenged in motor planning (how they put ideas and plans into action) or sequencing (how thoughts and behaviors are ordered).

Johnny, for example, is somewhat hypersensitive to auditory information, so he is very easily overwhelmed by too much noise. This creates a relationship challenge because when he is frustrated, he becomes more irritable and defiant. His parents tend to become loud and boisterous during these episodes, which only expedites Johnny's meltdowns. Other children who are hyposensitive tend to need more auditory stimulation in order to register information. Some are unable to register well at all through the normal auditory/visual pathway, requiring more intense sound, noise and movement in order to register information. Perhaps with autism, children may be auditorily hyposensitive and need strong visual input for information to register.

Sensory processing relates to how well a person can organize and make sense of the information coming through difference sensory pathways. If children process auditory information slowly (different than the lack of comprehension) and parents are communicating too quickly, they will not be able to keep up with their parents' instructions. Sometimes a person cannot integrate auditory and visual information, so if a teacher gives a lecture that has a lot of information written on the board, there is a struggle to both write it down and listen at the same time. Jackie has an auditory processing lag, which means it takes her approximately half a second longer to register incoming verbal information. This was a real

problem with other counselors because they would talk so fast that she could not track with them very well.

Motor planning has to do with how well the person sequences behaviors in a logical and goal-directed fashion. When people have difficulty with motor planning and sequencing, they also tend to have trouble with problem solving (e.g., identifying a problem, devising solutions, anticipating potential outcomes, deciding on a course of action, and translating the plan into concrete steps). Some people are holistic in how they see the world, but they cannot envision the necessary steps to break things down in the details of their day-to-day lives. This was a hindrance for Jackie because she tended to see the world in globalist, negative ways and had tremendous difficulty seeing (in her mind's eye) how she could solve basic problems like making and executing a plan to clean her messy kitchen. Her therapist would have to help her break this problem down into a step-by-step, concrete action plan.

Relationships (R)

The DIR model emphasizes that the developmental milestones (D) emerge within the context of relationally-attuned, engaged and supportive relationships, an insight supported by both attachment theory and contemporary neuroscience. In fact, what is seen in the DIR model matches exactly what is known about brain development. First, regulatory systems emerge with the myelination (maturation) and neural integration at the brainstem. Next, two-way emotional, gestural, and then verbal communication is ushered in as action within the limbic (emotional behavior) system. Finally, self-awareness and knowledge of thoughts and feelings appear with anterior and singular cortex (cognitive) development. These complex developments are relationally dependent. What this means is that [human] relationships do more than just provide general support factors. Very specific relationship qualities are needed for the brain to develop and the self to manifest these developmental capacities.

Parents who (1) provide safety, warmth and empathy; (2) engage in back and forth signaling; (3) accurately read their children's non-verbal signals; (4) help their children label internal experiences (e.g., asking them why they are upset and sticking with them until they can say it with words); (5) help their children define problems; (6) initiate plans to solve them; and (7) help their children think in more complex ways help foster secure attachments.

Johnny was extremely sensitive to criticism and tended to read hostile intention into others' ambiguous behavior. For example, one of his friends was quiet and non-talkative on the bus and Johnny was convinced it was because the friend was angry at him. Johnny's mother was able to see that he was in a grumpy mood and engaged him a conversation, helping him connect his mood to his belief that the friend was angry. She helped him think more multi-causally by suggesting other possible explanations for why the friend might have been quiet. They eventually discovered the other little boy was sick and subsequently missed a whole week of school.

Other researchers and clinicians are studying the powerful effects of these types of supportive, engaging, interactive relationship experiences, where parents help their children engage in emotionally charged social problem solving. Psychologist, John Gottman, a relationship expert, calls this type of interaction *emotion coaching*, and has found that in families incorporating this type of parenting approach, the children are more emotionally balanced and resilient to stress, have better social relationships, make better grades, and get sick less (Gottman, Katz & Hooven, 1996).

Parents who proactively support the development of these capacities, keeping in mind children's thought processes and individual differences, and consistently provide children with the right kind of relationship not only support their social-emotional functioning, but also impact the biological processes entailed in the brain's maturational process. The good news is that providing these necessary elements in therapy—promotion of developmental capacities, sensitive consideration of individual differences, and an interactive, supportive relationship context—holds the promise of putting people back on the natural developmental course with corresponding growth and change at the bio-psycho-social, and even spiritual, level. ✠

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