AD/HD and Executive Functioning Deficits
Assessment and Impact upon Personality Functioning

Definitions- DSM-IV-TR & NIMH

- Hyperactivity
- Impulsivity
- Inattention

Definitions- ICD

- AD/HD "...falls into a category of disorders known as hyperkinetic disorders that are characterized by: early onset, a combination of overactive, poorly modulated behavior with marked inattention and lack of persistent task involvement; and pervasiveness over situations and persistence over time of these behavioral characteristics... Impaired attention is manifested by prematurely breaking off from tasks and leaving activities unfinished. The children change frequently from one activity to another, seemingly losing interest in one task because they become diverted to another... Over-activity implies excessive restlessness, especially in situations requiring relative calm. It may, depending upon the situation, involve the child running and jumping around, getting up from a set where he or she was supposed to remain seated, excessive talkativeness and nosiness, or fidgeting and wriggling (pp. 262-265)."

Definitions- Parent Description

An excellent description of AD/HD, from an article by LegalЎs Adams titled "Will My Son Ever Achieve?" (South Alforos Quarterly, Spring 2003), is quoted below:

- "ADHD is an inherited, lifelong disorder thought to be linked to genes that affect the transport of dopamine, a chemical messenger in the brain. In people with ADHD, too little dopamine is available, primarily in the part of the brain that controls 'executive functions,' or cognitive rules like forming a plan and controlling reactions to stimuli. Essentially, people with ADHD tend to have weak short-term memory, difficulty making transitions between activities, and a limited ability to plan and to initiate thoughts, speech, and actions. While all ADHD people exhibit some degree of inattention, there is more variability in the degree of inattention, impulsivity, and hyperactivity that characterizes ADHD."

- "Impulsivity, or 'dribbling,' is the central element of ADHD. This inability to control reactions to stimuli may well explain all behaviors that characterize ADHD. For example, ADHD kids talk or move excessively, even those not classified as hyperactive. ADHD kids have trouble sticking to repetitive tasks. Their attention quickly shifts to any activity that’s more exciting and immediately rewarding. It’s easy to get distracted by other things and have trouble concentrating. They are 'hyperfocus' on what interests them and block out everything else."

- "Seventy 3 to 7 percent of children who have ADHD (about one or two in every classroom) and at least 20 percent carry the symptoms into adulthood. While there’s no cure for ADHD, research suggests that medication, such as Ritalin and Adderall, makes more dopamine available in the brain, increasing the ability to focus. Without medication, progress with behavioral and educational interventions is difficult, often impossible."

Executive Functions—What are they?

- Psychodynamic Diagnostic Manual (PDM), a 2006 publication of the Alliance of Psychoanalytic Organizations
- "...cognitive abilities necessary for complex goal-directed behavior and adaptation to a range of environmental changes and demands. Functions include the ability to plan and anticipate outcomes (cognitive flexibility), the ability to direct attentional resources to meet the demands of non-routine events, and self-monitoring and self-awareness, which are necessary for appropriateness of behavior and behavioral flexibility."
Relationship to Disorders of the Self

- **Learning Disorders and Disorders of the Self in Children and Adolescents**
  - *Joseph Palombo*, Institute for Clinical Social Work
  - *W.W. Norton & Company (2001)*

Disorder of the Self

- Development of the sense of self- associated with the child’s experience of the self.
- Emergence of the self-narrative- associated with child’s integration of the meaning of those experiences.
- “Children’s subjective experiences are filtered through their neuropsychological deficits and the context in which they are raised. Each restrict, modify, or impose constraints on the child’s experiences, while caregivers influence the child’s interpretations of those experiences. A pattern of reciprocal and circular interchanges between the child, the deficits, and the context is the hallmark of the interactions that ensue. (page 5, Palombo).”
- Different outcomes– psychopathological manifestations.

Palombo’s Concept of Disorders of the Self

Taking as his starting point the principle that all psychopathology must be understood from a developmental perspective, Palombo conceptualizes disorders of the self as occurring at the intersection between the context within which the child is raised and the neuropsychological strengths and weaknesses he or she brings to that context. The desire for a cohesive sense of self and coherent self-narrative is a central motive organizing the child’s development. When a child has a learning disorder and the relationship between the child’s context and neuropsychological deficits is out of balance, the effects are seen in school performance, relationships, sense of self, and self-narrative.

Concept of Self-Disorders

  - Without a certain degree of stability and reliability of one’s model of the world, including oneself, one faces the threat of succumbing to a serious destabilization of either one’s conceptual system or personality structure.
  - Rollo May (1950) The Meaning of Anxiety. Pathological anxiety can be tipped off by some threat to a value one “holds essential to his existence as a personality.”

Disorders of the Self- Important Contributors

- **Margaret Mahler**- separation and individuation
- **Heinz Kohut**– particularly the concept of “selfobject,” useful in delineating the ways in which others provide psychological functions necessary for one to maintain a sense of self-cohesion.
- **Stern**- infant research, psychoanalytic developmental theory
- **Anna Marie Weil**– “basic core”
- **Greenspan**- psychodynamic researcher, who includes a theory of cognition in his theory of development.
- **Jules Abrams**– Dynamic Developmental Interactionist Approach– We enter the world with a basic core– a genetic endowment and early pre-natal and perinatal experiences. Basically, one’s personality results from the interaction between biology and the environment.

Disorders of the Self- Important Contributions/Neuropsychological

- Minimal brain dysfunction, perceptual handicaps
- Neurobehavioral disorders: learning disorders, learning disabilities, and neurological conditions.
- Pennington (1991) *Diagnosing Learning Disorders*
Disorders of the Self: Integration of the Neuropsychological with the Psychoanalytic

• Conceptual challenge: to elucidate the interface between brain function and behavior in a way that is compatible with our psychological understanding of development (Palombo, page 22).

Explanatory Models

• Primary Nature: Behavioral Disinhibition (Barkley). Deficit in the capacity to delay responding to a stimulus. Diminished sensitivity to behavioral consequences, diminished control of behavior, poor rule-governed behavior.
• Barkley (1998)— self-control and self-regulation as central core features. A set: working memory; internalization of speech (verbal working memory); self-regulation of affect, motivation, arousal; and reconstitution. Failure to efficiently deploy: disruption in the motor control necessary for the execution of the task.
• Other: Torgersen—information processing; Levine—organizational failures/ty pes; Pennington—working memory and demands for inhibition.

Other Facts

• Prevalence (NIH) 3-5%. Gender differences = 3:1, per Barkley.

Developmental History—What is commonly seen?

• Activity level
• Segal (1996) nature of the mothering experience
• Sleep patterns
• Greater resistance to conformity, less rewarding
• Lack of ability to get positive orienting
• Need for more supervision and assistance
• Lack of depth
• Clumsy behavior
• Overstimulation/persers
• Other characteristics: fearless and aggressive; demanding; driven by a motor; accident prone; internalizing vs. externalizing symptoms; greater risk for substance abuse and antisocial behaviors.
• Kandel & Weinberger: restlessness, underractivity, procrastination; distractibility, blunting things with action; acting out, warning, avoiding, taking on danger; organizational difficulties; operating on multiple channels, hunger for sensations; indifference to boredom, low frustration tolerance, and verbal and behavioral hyperactivity.
• Hyperfocus.
• Inability to experience feelings of contentment or a sense of internal regulation (Palombo, page 152). Neuromedulatory system.
• Executive Deficits—perhaps become more manifest later.

Sense of Self

• “The aspect of endowment involved in AD/HD is the neuroregulatory control system (self–control and self-regulation), which is part of the executive functions (Palombo, 1996, p. 246). Because of the neuroregulatory deficits, the patient cannot adequately regulate thought processes, affect states, and/or behavior. The child’s responses are not congruent with the expectations of others in the context. Children with AD/HD are action-oriented and seldom give to introspection about their responses. They react before they have thought through their reactions and react to others’ expectations. Because of the neuroregulatory deficits, the patient’s thinking is subjectively oriented and does not take into account the personal perspective. Others interpret the child’s behind his responses and perceive the behavior to be defensive, oppositional, or negative. The child’s responses are not maladaptive motivated by a desire to make life miserable for his caregivers. It is only after patterns are established, in which the child expects to be misunderstood and is made angry because of his frustration, that he begins to see his behavior as self-oriented. The child’s frustration increases and eventually leads to rage and withdrawal.”

• “The core deficit is an inability to modulate a degree of hyperactivity, poor self-image, problems with parents, hyperactivity, short attention span, inability to concentrate, low frustration tolerance, inability to follow directions, difficulties in school, and poor sibling and peer relationships. Deficits in regulatory functions are seen in negativity, poor self-regulation, poor impulse control, and proneness to overstimulation. Although the parents may try to compensate for the child deficits, they are experienced as punitive and judgmental by the child. The security of emotional attachment is an underlying determinate, against which defenses are built.”

Sense of Self/Coherence of the Self-Narrative (AD/HD)

• Focus on the consequences of their actions rather than on their contribution to the situation they have created (Palombo, page 154).
• “I don’t know why these things happen to me and never to anyone else...” “I never wanted to hurt her feelings—she’s just a crybaby!”
• Victims of circumstance, justify behavior by how treated by others, pride in aggression.
• “clash between the personal meanings they assign to events and the shared meanings the community confers upon them” (Palombo, page 154)
Sense of Self/Coherence of the Self-Narrative (Executive Dysfunction)

- Progression to high school—may unable to avoid confronting the problem, beginning to experience anxiety and puzzlement about a lack of success.

Interventions

The importance of psychotherapeutic intervention as a modality in the treatment of AD/HD is often underestimated. While medication management is considered to be an essential component of treatment, individual therapy, combined with parent support and education, is often integral to the overall strategy for treating individuals diagnosed with AD/HD. Children/adolescents with AD/HD are far more likely to develop co-existing problems and/or disorders than individuals who do not suffer from this disorder. Difficulties in academic and social-emotional functioning are common. There is an increased likelihood of disruptive behavior problems, anxiety, depression, and substance abuse among youth diagnosed with AD/HD. Once a comprehensive evaluation has determined the presence of AD/HD and other related disorders, individual psychotherapy can help the child or adolescent learn to understand the nature of these difficulties and develop the necessary coping skills in order to maintain adaptive functioning. Parent education and training, as well as family therapy approaches, should also be considered when behavioral or emotional problems that are common in children diagnosed with AD/HD exist in the home/family environment. This type of assistance to parents typically includes instruction in behavior management techniques specific to the needs of the AD/HD child/adolescent.

Interventions

- Barkley/Bronski’s Model of Delayed Responding. 1) Disinhibition leads to a failure in prolongation (thinking before acting). 2) failure to separate feelings from facts. 3) failure to use self-directed speech or self-talk in achieving self-control. 4) failure to break apart and recombine information (analysis and synthesis).

Interventions

- Test Battery.
- With regard to an AD/HD diagnosis, parents are encouraged to consider that treating AD/HD in children requires medical, educational, behavioral, and psychological interventions. According to CHADD (Children and Adults with Attention-Deficit/Hyperactivity Disorder), the comprehensive approach to treatment is called “multi-modal” and consists of parent and child education about diagnosis and treatment, specific behavior management techniques, stimulant medication, and appropriate school programming and supports. Behavioral interventions are often a major component of treatment. Some effective behavior management strategies include: being consistent, using natural reinforcers, and teaching problem solving skills. It is also important to note that treatment is a continuous process and requires time, patience, and effort. Some children may respond quickly to treatment, while others may require more time and patience. For long-term success, AD/HD children often require medication for symptom management as well as support and educational intervention; some also require special educational services. Most AD/HD children experience a period of increased disruptive behavior during the transition from childhood to adolescence. However, long-term outcomes are positive outcomes than children who received behavior therapy alone or community care.

Interventions

- Palombo: parents—positive reinforcement of acceptable behaviors and logical consequences for unacceptable behaviors.
- Depression may manifest differently.
Reading Materials for Children with Behavioral Dysfunction

- As Dr. Greene suggests in *The Explosive Child*, individuals who are disorganized and show poor impulse control often fail to anticipate social consequences and to make appropriate plans for action. They tend to become impulsively negative (i.e., saying "no" or otherwise negative remarks to all suggestions from others) and to show a reduced range of behaviors or rigidity. They often struggle to respond appropriately in complex or emotionally charged settings that require responsiveness to multiple sets of demands.

- **Dr. Greene** promotes the idea that "inflexibility + inflexibility = meltdown." In other words, when a child is being inflexible, a power struggle can easily ensue; in such a struggle, the adult too, can become inflexible, and together these attitudes facilitate a meltdown in the child. The ideas in Dr. Greene's book are based on the premise that inflexible children can easily bring out inflexibility or rigidity in adults, particularly when typical behavioral interventions are not successful. Dr. Greene also suggests that parents and teachers of "inflexible-explosive" children head the point at which the child's behavior becomes incoherent and to read the behavior for just what it reflects in the child: momentary incoherence. Through this recognition, adults are encouraged to avoid reasoning with the child during a period of incoherence unless the inappropriate behavior is causing a safety risk, and therefore, an intervention is needed regardless of the potential for meltdown.

- Failing to brush */Her* teeth or to be polite at the dinner table are not behaviors that should be placed in this category. Showing the "child who’s boss" in such situations is not worth the probability of a major meltdown, especially since this is not appropriate behavior in a child that is not ready to respond to the mentor's behavior in a fluid and adaptive manner.

- The premise in this book is to reinforce the parent's position as an authority figure or to help the child become more flexible and able to handle frustration.

Reading Materials for Children with Behavioral Dysfunction (cont.)

- Dr. Greene suggests there are times and behaviors that call for teaching of frustration tolerance and flexibility, which he refers to as "skills." Behaviors in this category are important but should not be behaviors over which the parent is willing to induce a meltdown. As Dr. Greene notes, most "inflexible-explosive" children are quite limited in their ability to engage in the give-and-take behaviors needed to arrive at mutually agreeable solutions when two people disagree. Teaching the child negotiation skills involves modeling, practice, and the use of rewards. Other keys to teaching these skills are empathy for the child's position, an openmind, and the child's need to engage in mutual problem solving, and the willingness to organize and reframe the problem for the child in understandable terms.

- Dr. Greene encourages parents to be aware of their child's limitations in this process, to accept that there are behaviors to be ignored, and to realize that a short list of prioritized behaviors should be targeted for intervention.

Sensory Processing Dysfunction

- Many AD/HD children struggle with sensory integration; i.e., a process that refers to the integration and interpretation of sensory stimulation from the environment by the brain. Impairments in sensory integration often produce varying degrees of problems in development, information processing, and behavior; children with these difficulties may be over- or under-responsive to sensory input. Behaviorally, they may be impulsive and easily distractible, show a lack of planning and organization, and/or have difficulty adapting to new situations. Oftentimes, occupational therapists can provide very appropriate and effective interventions for children with similar issues. Essentially, the goals of such treatment include finding means of providing the child with sensory information that can be organized internally, helping the child to become more aware of his own internal states and response to environmental stimuli, and assisting the child in developing methods of inhibiting/modulating sensory information.

A Personal Experience

**Wanderlust**

- A girl or a longing tendency that I was born with is the desire to explore and challenge the unknown. In my youth this was extremely pronounced. Grew my mother more [jargon the pur]
- In multiple seasons, she had to know the game out for me 2000’s (2000’s)
- But, for some reason my inate became chained to the cycle of life—repeatedly after dark.
- The lure of the unknown was like a powerful magnet to me. I was fearless and curious about everything. At the age of two, [jargon me] I learned to tick the toe of my cowgirl boots into the top of the garage and then roll myself over the top, falling to the ground. There I was off down the alley.
- At age three we had moved, but the new four- foot chain-link fence offered a similar fate. Upon bending on the ground I would either pioneer the neighborhood being built or sneak over to the nearby farm—under the guise of children. I especially liked to lie on the road and play hide and seek with the chickens.
- Parade to the south. I was six and a half. I felt a very tightness in my feet, and then I was a way to still stay on it. He told my mother that she had not laid eggs since we lived there.
- Ensure that the fish on the far side of the hill has stayed with me. I dream of when my son and I go “deer camping.” Hiking new territory that is unfamiliar is a great thrill for me.
A Personal Experience (cont.)

Academic Boredom

- I was a gifted child and my IQ tested at 130. Although I started out slow, I became a voracious reader. I read every science book and watched every science and technology show on TV, including science fiction. I saw profoundly gifted people doing what we now call systems analysis and theoretical physics. On my own, I envisioned the ‘flying tail’ for aircraft.

- Unfortunately, my interests were never cultivated by the teachers. I never was asked to be part of the science club, etc. Likely this was due to their perception that I was trouble. Actually, I was very well behaved in the classroom. On the playground I was just demanding and to be candid, they loved most those kids who were seemingly invisible and demanded only slight effort on their part; this I was most definitely not. I crave their attention, encouragement and approval, but received at best toleration.

- Occasionally, I received from a well meaning individual something that was even worse than hostility—pity. These people meant well, but clearly did not understand anything about me. The look in their eyes and the tone of their voice just devastated me. When I received ‘the look’ my self confidence melted and I retreated inward. I knew I was doing the ‘right’ thing and could stand up to a challenge from anyone, but pity was something quite different.