Risk, Resilience and ADHD

Sam Goldstein Ph.D.
Assistant Clinical Professor of Psychiatry
University of Utah
Affiliate Research Professor of Psychology
George Mason University

www.samgoldstein.com

CHADD Calgary
Children and Adults with Attention Deficit Hyperactivity Disorder
Relevant Disclosure

• Editor in Chief of the Journal of Attention Disorders
• Author of a number of textbooks and trade books about ADHD
• Compensated Speaker
• Clinician
Goals for This Presentation

• Discuss current knowledge and research about ADHD etiology, conceptualization, diagnosis and treatment.
• Discuss current knowledge and research about resilience as a clinical phenomenon.
• Integrate these two areas to appreciate and apply a strength based model in the treatment and educational guidance of ADHD.
What is self-regulation/self discipline?
Self-discipline can be understood as a vital component of a sense of ownership and responsibility for one’s behavior.
The need to develop and effectively harness self-discipline at an early age, while critical in any culture, may take on greater importance in a society filled with complex demands, challenges, and stresses. The possession and ability to effectively utilize self-discipline paves a successful road into adulthood.
It is not surprising that in our fast paced, seemingly chaotic world, children capable of implementing self-discipline at young ages appear to negotiate the maze of family, school, friends, and community more successfully than those who struggle with this ability.
Effective self-discipline implies that a child has internalized a set of rules so that even without the presence of a parent or other caregiver, the child will act in a thoughtful, reflective manner.
What happens to children when they struggle to keep pace in the maturation of their self-discipline?
We fail to appreciate that children are genetically endowed with certain patterns of behavior and thought.
What Are These Traits?

The drive to help.
The drive to mastery.
Altruism.
Self-discipline
Social connections.
Instinctual optimism.
Intrinsic motivation.
The experience of growing up with ADHD absent often steals away opportunities to develop a resilient mindset.
Children with educational vulnerability driven by un- or undertreated ADHD become failure avoiders when the well meant efforts of parents and teachers fail.
Defining ADHD
What is ADHD?

ADHD is a biopsychosocial condition characterized by core symptoms of inattention, hyperactivity and impulsivity leading to/interacting with specific cognitive/neuropsychological deficits causing impairment in all walks of life.
What is ADHD?

• ADHD appears to primarily involve the basal ganglia, cerebellum and variably the frontal lobes, depending on associated learning difficulties.
• Comorbidity with ADHD probably confounds findings from different study groups. (Hendren et al, 2000)
• The symptoms of ADHD lead to a nearly infinite number of consequences
ADHD is a condition stemming from inefficient self-regulation.
Self-regulation

• The ability to inhibit
• The ability to delay
• The ability to separate thought from feeling
• The ability to separate experience from response
• The ability to consider an experience and change perspective
• The ability to consider alternative responses
Self-regulation

• The ability to choose a response and act successfully towards a goal
  » The ability to change the response when confronted with new data

• The ability to negotiate life automatically

• The ability to track cues
Children with ADHD aren't Clue-less

They are unfortunately often clue-less!
Poor Self-regulation

- Poor self-regulation is synonymous with
  - poor self-control
- Poor self-regulation leads to
  - impulsive behavior
Inattention

- Conditions under which inattention is observed
  - Repetitive
  - Effortful
  - Uninteresting
  - Not chosen
Consequences if inattention

• Conditions under which problems with consequences are observed
  – Delayed
  – Infrequent
  – Unpredictable
  – Lacking saliency
Is there a broader conceptual model to understand, explain, evaluate and treat ADHD?
Executive Functioning (EF)

EF is comprised of internal and/or external procedures necessary to engage in purposeful behavior and achieve goals.
What is Executive Functioning (EF)?

• Absent in nearly all of the literature on EF is any truly operational definition of the concept itself
  – One typically finds a vague general statement of EF (e.g., social intelligence, goal-directed action, cognitive control, top-down inhibition, effortful processing, etc.)
  – Or a battery of tests believed to assess EF
  – Or a listing of the constructs subsumed by the term
    • e.g. Inhibition, Nonverbal and Verbal Working Memory, Planning, Problem-Solving, & Goal-Directed Activity, Strategy Development and Execution, Emotional Self-Regulation, Self-Motivation
Executive Functioning Requires:

1. An intention to act.
2. Formulation of a goal of action.
3. Formulation of a plan of action.
4. Temporally sequencing the chosen plan of action.
5. Executing the plan smoothly from step to step.
6. Evaluating and re-evaluating the outcome in light of the objective.
7. When successful move on – if failed rethink from step #3.
EF is comprised of internal and/or external procedures necessary to engage in purposeful behavior and achieve goals. EF comes online when one or more of these conditions are present:

1) when a cognitive task is new as opposed to familiar or practiced;
2) when a cognitive task is difficult as opposed to easy;
3) when the conditions of the task vary as opposed to remaining stable and predictable;
4) when behavior is not automatic; and
5) when a quick response is required.
The frontal lobes in combination with mid-brain structures in the basal ganglia and the cerebellum are key to efficient EF. Their inefficiency is in part responsible for ADHD.
Just as intelligence is more than the sum of certain intellectual processes, so to is EF more than just the sum of certain functions. As such to understand EF one must be able to quantify an outcome, not just a set of hypothetical functions.
Processes Controlled by Frontal Operations

- Attention
- Decision Making/Problem Solving
- Flexibility
- Impulse Control
- Emotional Control
- Initiation
- Memory
- Organization
- Persistence
- Perspective Taking
- Self/Performance Monitor
Flexibility – (adaptability). The capacity to make appropriate responses to changed or changing situations; the ability to modify or adjust one’s behavior in meeting different circumstances or people.
Emotional Control: A process of restraining one’s affective responses Initiation – voluntary exertion to begin goal-directed activity; planning, launching, and initiating goal-directed activity.
Organization: The structure discovered in or imposed upon a set of items in order to guide memory performance; coordinated mental processes or behaviors.
Persistence: Continuance or repetition of a particular behavior, process, or activity despite cessation of the initiating stimulus; quality or state of maintaining a course of action or keeping at a task and finishing it despite the obstacles or effort involved.
Perspective Taking: Looking at a situation from a viewpoint that is different from one’s usual viewpoint.
Performance/Self Monitoring: Communication with the self or a meta-awareness of one’s actions allowing for error detection, changing response patterns, etc.
So is ADHD an EF Disorder?
Should we re-label ADHD as EFDD?
ADHD Characteristics

• ADHD “results from a failure in self-control” (Barkley, 1998, p. 66)

• Symptoms:
  – problems with inhibition of prepotent responses which limits control of behavior
  – lead to poor planning and anticipation
  – poor organization
  – impaired verbal problem solving and self-directed speech, poor rule governed behavior
  – problems developing, using and monitoring organizational strategies;
  – (Barkley, 2003).
Is this a just another tool to measure ADHD?

About the CEFI
The Comprehensive Executive Function Inventory (5–18) [CEFI (5–18)] is used to quantify observations of a child’s behaviors related to executive functioning. In combination with other information, results from the CEFI help calibrate the child’s level of executive functioning in the areas of attention, emotion regulation, flexibility, inhibitory control, and initiation organization, planning, self-monitoring, and working memory. This information can be used to determine intervention goals. This computerized report combines the results of up to five raters to provide an overview of the child’s behavior.
A New Paradigm

• Intelligence comprises abilities needed to solve problems.
• Knowledge is all acquired information employed selectively to solve problems.
• Self-discipline/control is essential to inhibit sufficiently to solve problems.
• Motivation is the interest/drive the individual possesses to persevere.
• EF is the efficiency needed to manage all of these components successfully. It is the proverbial “grease for the gears”
ADHD Characteristics

• Children with ADHD may have difficulty with some but not all ‘executive functions’.
• Shared deficits may be related to frontal lobe deficits.
• If ADHD is a failure of self-control within the context of prefrontal lobe functions (see Goldberg, 2001) -
• Then a connection between the disorder and the PASS theory described by Naglieri and Das (2005) based on A. R. Luria’s work can be made.
ADHD Characteristics

There is considerable research that suggests that children with ADHD have a specific profile of abilities on the Planning, Attention, Simultaneous, Successive (PASS) theory of Luria.

Dehn, 2000;
Paolitto, 1999;
Iseman, 2005;
Naglieri, Goldstein, & Iseman, 2003;
Naglieri, Salter & Edwards, 2004; VanLuit, Kroesbergen & Naglieri, 2005
They Struggle With Planning

PASS Processing Scores

- ADHD
- ASD
- SLD

Graph showing processing scores for Planning, Simultaneous, Attention, and Successive categories.
ADHD acts as a catalyst fueling other developmental and environmental risk factors.
The Consequence Is Worse Than the Symptom

NEGATIVE REINFORCEMENT
Five keys to successful support of people with ADHD

• Make tasks interesting
• Make payoffs valuable
• Adjust expectations for change
• Allow more trials to mastery
• Focus on assets/resilience
Resilience is a process focusing upon strengths/assets to overcome adversity.
Resilience

• A process leading to good outcome despite high risk
• The ability to function competently under stress
• The ability to recover from trauma and adversity
“I’m not afraid about my girlfriends and myself, we’ll squeeze through somehow, though I’m not too certain about my math.”

Anne Frank
June 21, 1942
“I have lots of courage, I feel so strong and as if I can bear a great deal, I feel so free and so young! I was glad when I first realized it, because I don’t think I shall easily bow down before the blows that inevitably come to everyone.”

Anne Frank
July 15, 1944
Person Attributes Associated With Successful Coping*

- Affectionate, engaging temperament.
- Sociable.
- Autonomous.
- Above average IQ.
- Good reading skills.
- High achievement motivation.
- Positive self-concept.
- Impulse control.
- Internal locus of control.
- Planning skills.
- Faith.
- Humorous.
- Helpfulness.

* Replicated in 2 or more studies
Environmental Factors Associated With Successful Coping*

- Smaller family size.
- Maternal competence and mental health.
- Close bond with primary caregiver.
- Supportive siblings.
- Extended family involvement.
- Living above the poverty level.
- Friendships.
- Supportive teachers.
- Successful school experiences.
- Involvement in pro-social organizations.

*Replicated in 2 or more studies.
The pathways that lead to positive adaptation despite high risk and adversity are complex and greatly influenced by context therefore it is not likely that we will discover a magic (generic) bullet.
Resilient children are not simply born that way nor are they made from scratch by their experiences. Genetic and environmental experiences loom large as protectors against a variety of risks to healthy development ranging from resistance to bacteria and viruses to resilience to maltreatment and rejection.

Kirby Deater-Deckard
Diagnosis may be a simple matter of counting symptoms however assessment is not.
ADHD brings with it increased vulnerability.

- Mood disorders.
- Anxiety disorders.
- Personality disorders.
- Academic failure.
- Substance abuse and addition.
- Obesity and health risks.
- Relationship problems.
- Vocational problems.
- Financial problems.
Assessment Requires

• Detailed history.
• Observation direct and indirect.
• Diagnosis.
• Cognitive, academic, emotional and neuropsychological data.
• Appreciation of available resources.
• Consideration of additional diagnoses.
• Treatment formulation.
Treatment Plan For ADHD

- Education
- Thorough assessment
- Medication
- Behavior management
- Educational support
- Long term perspective
- Build success
- Focus on resilience
If great men and women suffered from ADHD their achievements were despite not because of ADHD.
Stimulant Trends
Pills will not substitute for skills

But they will relieve symptoms
Psychosocial Interventions for ADHD

- Environmental manipulation of the physical plant
- Environmental manipulation of consequences
- Modification of cognitive function
Symptom relief is not synonymous with changing long term outcome.
What Qualities Define the Best School for Students With ADHD?
What Qualities Define the Best Teacher For Students With ADHD?

Qualities That Define the Best Teacher For All Students!
Some Qualities of Good Teachers

• Empathic
• Communicate Well
• Seek the best in every student
• Focus on strengths not weaknesses
• Make children feel welcome in the classroom
• Educate enthusiastically
• Seek to understand before being understood
• Change methods not students
“Make the work interesting and the discipline will take care of itself”

E. B. White
What teachers want from children with ADHD

• TO THINK
• TO START
• TO STOP in concert with all students
“The secret of education lies in respecting the student”

Ralph Waldo Emerson
The Essential Mindset For Youth With ADHD

- The world makes sense.
- I can control myself.
- I am part of a community.
- I can solve problems and learn from mistakes.
- I feel loved and appreciated.
- I am intelligent.
The Essential Mindset For Youth With ADHD

- If I’m willing to try a different way I can be successful.
- Hopeful and optimistic.
- I can make a contribution.
- I am worthy.
- The world is fair.
Adopt a learning to ride a bicycle mindset!
Stress Hardiness

• Committed to finding a meaningful purpose in life.
• A belief that you can influence your surroundings and outcome of events,
• A belief that you can learn and grow from both positive and negative life experiences.
Focus on Well Being!

• COMPETENCE in academic, social and vocational areas
• CONFIDENCE or a positive identity
• CONNECTIONS or healthy relations
• CHARACTER or positive values, integrity, and values
• CARING and compassion

(Lerner et al, 2000, 4-H Study)
An Example of Five Strategies To Foster a Resilient Mindset

• Teach empathy by practicing empathy.
• Teach responsibility by encouraging contributions.
• Teach decision making and problem solving skills that foster self-discipline.
• Offer encouragement and positive feedback.
• Help children deal with mistakes.
www.samgoldstein.com
info@samgoldstein.com