The Evaluation, Treatment and Education of Children with Developmental Disabilities

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Relevant Disclosure

• My expenses for this talk are supported by Rehab Seminars.
• I have developed tests marketed by Multi-Health Systems, Pro-Ed and Western Psychological Services.
• I am Editor in Chief of the Journal of Attention Disorders (Sage) and Co-Editor of the Encyclopedia of Child Development (Springer).
• I am a compensated speaker.

Course Objectives

• Describe how normal brain growth, human development and instincts relate to the acquisition of academic knowledge, emotional regulation, socialization, and general behavior.
• Understand our changing views of child development and learning.
• Understand the role of instincts in facilitating normal child development.
• Describe a conceptual model to appreciate atypical development and abnormal behavior in childhood.
• Describe the application of three types of formal and informal means of assessment.
• Describe the role of executive functioning in a broad range of emotional, behavioral and academic phenomena.
• Describe the role resilience qualities serve in insulating and protecting youth at risk.
• Explain a means to evaluate impairment as a separate issue from a broad range of developmental challenges or delays.
• Describe how to apply the Building Blocks model to understand and develop intervention strategies.
• Describe a broad range of strategies to assist children with developmental, emotional and behavioral disorders.
The Future

A man goes fishing.

The purpose of life is to prepare the next generation for their future.
Survival of the Species

- Salmon and snakes are born with sufficient instincts to survive.
- Bear cubs require at least one or two years with their mother to insure survival.
- Higher primates require three or four years.
- Humans require at least ten years.

The Math of the Developing Brain

Addition, Subtraction, and Reorganization

Brain Development

First trimester  Second trimester  Third trimester
Neurological development is not a simple process of gradual growth from simple to complex.

Development Occurs from Conception Through Childhood.

- Additive processes involve proliferation of neurons, development of synaptic connections and myelination.
- Subtractive processes involve programmed cell death prenatally and synaptic pruning postnatally.
- Development is more than overproduction followed by cutting back, substantial functional reorganization takes place.

Differences in the Ways the Brain of the Young Child Differs From the Adult.

- Increased metabolic activity peaking at 150% by two years of age
- Focal or localized brain functions in adults are carried out by diffuse regions in children
- Adults utilize inhibitory processes, children do not as routinely
- Less automatization of brain-mediated functions in children
Compared with the brain of the child, representation of function in the adult brain is likely to be more focal, to make greater use of inhibitory processes, and to implicate non-cortical regions associated with the automatization of skills.

We have perpetuated the nineteenth century perception that raising children is a process by which information is dumped into a **BLACK BOX** lying mysteriously within the human brain.

**I Had a Revelation in St. Augustine, Florida**

*The World Operates Along a Normal Curve!*
We have also assumed a *Stepford Wives* model that all black boxes are identical.

How I Was Trained

**All Children:**

- With all children, share qualities
- Possess qualities unique to them
- Share positive or negative qualities with sub-groups

Todd’s Story

“I thought he’d be a smart criminal...”
We have done a very good job of marketing the concept of school to young children.

We have been successful in doing so because they possess many critical instincts, most importantly Intuitive Optimism and Intrinsic Motivation.
How Will They Feel and Behave in Five Years?

“The secret of education lies in respecting the student”

Ralph Waldo Emerson

The experience of growing up absent success for some students steals away opportunities to develop a resilient mindset.
A lesson from Michael.

We fail to appreciate that children are genetically endowed with certain instincts.

Human Instincts
• In some species instincts are fixed patterns of behavior leading to a certain outcome such as a bird building a nest for the first time or a salmon returning upriver to its' birthplace to spawn.
• Instincts in our species represent an intuitive way of thinking and/or acting increasing the chances of survival and success.
• In viewing instincts in this way we appreciate that knowing what to think or do and doing what you know or think are not synonymous and are very much dependent on experience.
• These instincts are more important than ever in preparing today's children for tomorrow's successes.
The Seven Instincts of Tenacity

• Intuitive Optimism
• Intrinsic Motivation
• Compassionate Empathy
• Simultaneous Intelligence
• Genuine Altruism
• Virtuous Responsibility
• Measured Fairness

Intuitive Optimism

• Intuitive optimism can be defined as born believing.
• The more complex the species, the longer the time taken to mature, the more tasks to be mastered, the more important it becomes to believe success or a goal is attainable.
• Intuitive implies that children do not have to learn by experience alone, they just know.
• Optimism implies that no matter what challenge comes before them they retain the belief that with perseverance they will ultimately experience success.
• Intuitive optimism explains why children absent any knowledge of their capacity or potential for success are willing to try again and again to master developmental tasks.

Intrinsic Motivation

• Intrinsic motivation is best defined as motivation from the inside out. It is not derived from guilt but from the joy of success.
• It is not derived from coercive, punitive, or reward driven parenting but from creating opportunities for children, even at young ages, to experience pleasure from success and achieving goals.
• Young children want to help even if the task is beyond their means.
• Their reward is built into the task.
Compassionate Empathy

- Empathy is the ability to understand another person's point of view.
- Such understanding is the foundation of communication, respect, and morality.
- Compassion is sympathetic pity and concern for the plight of others.
- Thus compassionate empathy is an understanding and concern for the misfortunes of others and the capacity to feel what they feel.

Simultaneous Intelligence

- Simultaneous intelligence guides our practical understanding of how elements of a problem fit together into a solution.
- Simultaneous intelligence is best defined as the ability to see how all the parts fit together when solving problems.
- This instinct is not culture or experience bound. For two thousand years intelligence was defined as how well you solved problems not how well you could read or write.
- After all, academic achievement for all is a late nineteenth century idea. Unfortunately, the advent of mandatory education 150 years has led intelligence to be largely defined as the extent to which a child possessed a body of knowledge.
- Even today many schools require advanced academic achievement or acquired knowledge along with strong simultaneous intelligence to qualify for gifted education.

Genuine Altruism

- Altruism is an unselfish concern for and support and survival of others.
- Genuine altruism is most synonymous with what we might consider as “pure” altruism.
- It is the giving of yourself with no expectation of a return for your actions.
- We help others achieve their goals even when the helper receives no immediate benefit and the person helped is a stranger.
- Genuine altruism is rare among nearly all species and may be a unique human instinct.
- Researchers have demonstrated that children as young as 18 months will readily help others to achieve their goals.
- This form of helping others without reciprocity is strongly driven by compassionate empathy and related to virtuous responsibility and measured fairness, which we will discuss below.
Virtuous Responsibility

• Virtue is about principles and ethics.
• The roots of virtuous responsibility run deep in our genes. Responsibility begins with the intrinsic motivation young children possess to be helpful.
• They take great pleasure when engaged in what we have called “contributory activities” as is evident in their bright smiles when their actions are complimented and appreciated.
• These contributory activities are displayed during each and every day. They want to help us cook, take care of younger siblings, rake leaves, mow the lawn, build with our tools, sweep the kitchen, and set the table.

Measured Fairness

• The instinct of measured fairness lies at the fundamental level of our social selves.
• This world and the many species in it evolved and survived based on this instinct.
• For thousands of generations being fair to others in your family or tribe insured everyone’s survival.
• Everyone contributed equally. And so, fairness has its nemesis: unfairness.

Do Children Care What We Think? Part I
Do Children Care What We Think? Part II

The Bus Test

Not surprisingly all but two things we do as educators and mental health professionals are dimensional!

Diagnosis
Eligibility Determination
The Disruptive Continuum of Behavior

- Difficult Temp
- Attention Deficit
- Oppositional Defiance
- Conduct Disorder

The Non-disruptive Continuum of Behavior

- Depression
- Anxiety
- Learning & Social Problems

Building Blocks of Learning

- Executive Function
- Language
- Phonology
- Orthography
- Motor
- Emotions
- Self-esteem
- Behavior
- Self-regulation
- Foundation
- Environment
How Shall We Understand, Define and Categorize Mental Illness and Developmental Problems in Children?

- By etiology or cause?
- By emotions, abilities, behaviors and thoughts?
- By impaired function in activities of life?

Diagnosis

Medicine/Medical.

The process of determining by examination the nature and circumstances of a diseased condition.

The decision reached from such an examination.

Eligible

definition

Having the right to do or obtain something, satisfying the appropriate conditions.

“Customers who are eligible for discounts”

Synonyms: entitled, permitted, allowed, qualified, able

“Those people eligible to vote”

(of a person) desirable or suitable as a partner in marriage.

“The world’s most eligible bachelor”

Synonyms: desirable, suitable

Determining eligibility is an outcome best understood and obtained by a thorough examination.
How distinct are these disorders from each other?

Much less so than makes me comfortable!

Co-Occurrence/Comorbidity

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How distinct are these disorders from each other?

Although the National Institute of Mental Health (NIMH) has prepared well for this undertaking, much remains to be done. Rigorous diagnostic procedures are available for some mental disorders, but not all. Studies to identify the genes that influence the onset of mental disorders have been initiated, but too few are large enough to efficiently detect these genes. Dedicated investigators are working on various aspects of mental disorders, but more researchers with training in molecular and statistical genetics are required (NIH, 1997).

How distinct are these disorders from each other?

For over a century, psychiatric disorders have been defined by expert opinion and clinical observation. The modern DSM has relied on a consensus of experts to define categorical syndromes based on clusters of symptoms and signs, and, to some extent, external validators, such as longitudinal course and response to treatment. In the absence of an established etiology, psychiatry has struggled to validate these descriptive syndromes, and to define the boundaries between disorders and between normal and pathologic variation.

How distinct are these disorders from each other?

Before the modern era of genomic research, family and twin studies demonstrated that all major psychiatric disorders aggregate in families and are heritable. Over the past decade, the success of large-scale genomic studies has confirmed several key principles: (1) psychiatric disorders are highly polygenic, reflecting the contribution of hundreds to thousands of common variants of small effect and rare (often de novo) SNVs and CNVs; (2) genetic influences on psychopathology commonly transcend the diagnostic boundaries of our clinical DSM nosology. At the level of genetic etiology, there are no sharp boundaries between diagnostic categories or between disorder and normal variation.
Comorbidity is the **RULE** not the Exception

What is the Goal of a Comprehensive Evaluation?

- Identify and define symptoms?
- Identify and define strengths and weaknesses?
- Appreciate the relationship of a set of symptoms to a unitary condition?
- Define limits of functional impairment to set a baseline for intervention?

Components of a Thorough Assessment

- History
- Broad Spectrum Questionnaires (Parent and Teacher)
- Impairment, Risk, Executive Functioning
- Narrow Spectrum Questionnaires (Parent and Teacher)
- Self report Questionnaires
- Ability Assessment
- Achievement Assessment
- Interview with Child
General Guidelines for a Comprehensive Evaluation

- A distinction should be made between acute vs. chronic problems.
- Person and environment protective factors need to be understood.
- Assessment should be strength and risk focused.
- Test results should be presented in ways that are useful to consumers (e.g., family, school, etc.).
- The least amount of assessment needed to answer referral questions should be completed.

Critical Issues

- Assess for intervention
- Understand positive and negative predict
- Understand sensitivity vs. specificity
- Begin with the disruptive/non-disruptive
- Keep low incidence problems in mind
- Consider resilience (protective) factors
- Measure impairment

Critical Issues

- Demographics
- Symptoms vs. consequences
- Categories vs. dimensions
- Eligibility vs. diagnosis
- Developmental pathways: accept a moment in time
- There are no shortcuts
- Assess the environment
Resilience is Predicted Factors Within:

The Child

The Family

The Culture

“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

“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
A process leading to good outcome despite high risk.
The ability to function competently under stress.
The ability to recover from trauma and adversity.

Good Coping = Resilience

Four Waves of Resilience Research
1. Identifying person and variable-focused factors that make a difference.
2. Understanding the operation of these factors within systems with a process focus.
3. Intervening with an individual to foster resilience.
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.
Assessment of Risks and Strengths
Risk Inventory and Strengths Evaluation (RISE)

- Protective (Resilience) Behaviors
  - Emotional Balance
  - Interpersonal Skill
  - Self Confidence

- Risky Behaviors
  - Bullying
  - Delinquency
  - Health
  - Sexual
  - Substance Abuse
  - Suicide

RISE Overview

- The first tool to look at these concepts within the context of each other
- Ages 9 through 25 years; Parent, Teacher and Self Forms
- 15-20 minutes administration time
- Norm-referenced T-scores examine broad constructs of risk and strength
- Response validity scores also available
- For educational psychologists, counselors, clinical psychologists and other mental-health professionals working with children, adolescents and young adults (Level C)
Validity: Clinical Groups

At-Risk Sample (n = 160): Key validation sample for RISE qualifying for prevention and intervention services because of unfavorable socioeconomic circumstances, current gang members, ex-gang members, and youth on probation.

RISE scores differentiate at-risk youth from typically developing youth with large, clinically significant effect sizes.

Validity studies also cover a range of additional groups (clinician-assigned diagnosis):
- Gang Membership
- Suicidality/Depression
- ADHD
- ASD
- Eating Disorders
- Substance Abuse

Ability, Knowledge and Skill

Five Key Early Achievement Abilities
- Label
- Association
- Retrieval
- Sequence
- Orthographic

PASS Theory

- **PASS** theory is a neuropsychological way to define and measure "ability" based on
  - P*laning = THINKING ABOUT THINKING
  - A*ttention = BEING ALERT
  - S*imultaneous = GETTING THE BIG PICTURE
  - S*uccessive = FOLLOWING A SEQUENCE
PASS Theory: Planning

Planning is a neurocognitive ability that a person uses to determine, select, and use efficient solutions to problems.
- Problem solving
- Developing plans and using strategies
- Retrieval of knowledge
- Impulse control and self-control
- Control of processing

Planned Codes

- Child fills in the codes in the empty boxes.
- Children are encouraged to think of a good way to complete the page.

Planned Codes

- Page 2
- What is a good plan to complete this page?
- Note orientation
Math Strategies

Note to the Teacher: When we teach children skills by helping them use strategies and plans for learning, we are teaching both knowledge and processing. Both are important.

Knowledge and Planning Learning Curves

- Learning depends upon instruction and intelligence (PASS)
- At first, PASS plays a major role in learning
- When a new task is learned and practiced it becomes a skill and execution requires less PASS

Over time and with experience

Role of Planning Role of Knowledge and Skills

PASS Theory: Planning

Planning
- Evaluate a task
- Select or develop a strategy to approach a task
- Monitor progress during the task
- Develop new strategies when necessary

Examples of classroom problems related to planning:
- Struggling with how to complete tasks
- Misinterpretation of what is read
- Not monitoring progress during a task
- Misunderstanding of what is read
Attention is a basic neurocognitive ability we use to selectively attend to some stimuli and ignores others.

- focused cognitive activity
- selective attention
- resistance to distraction

PASS Theory

Attention is a basic neurocognitive ability we use to selectively attend to some stimuli and ignores others.

- focused cognitive activity
- selective attention
- resistance to distraction

CAS2 Expressive Attention

The child says the color not the word. Score is time and number correct.
The child says the color not the word.

The child tells if the animal is large or small, regardless of the relative size on the page.
Number Detection

- Items 1-4 have 180 numbers on each page
- Each child is given two pages
- Targets appear at the top of the page
- Score for targets found and false detections

Attention

This sheet has a strong attention demands because of the similarity of the options.

PASS Theory: Attention

- Focus on one thing and ignore others
- Resist distractions in the learning environment

Examples of classroom problems related to Attention:
- Trouble focusing on what is important
- Difficulty resisting distractions
- Difficulty working on the same task for very long
- Unable to see all the details
- Providing incomplete or partially wrong answers

PASS Theory

**Simultaneous** processing is a basic neurocognitive ability which we use to integrate stimuli into groups

- Stimuli are seen as a whole
- Each piece must be related to the others
- Wechsler Nonverbal Scale
- KABC Simultaneous Scale

PASS Theory

- **Simultaneous** processing is what Gestalt psychology was based on
- Seeing the whole

CAS2 Matrices

Child selects one of the options that best completes the matrix
CAS2 Verbal-Spatial Relations

Which picture shows a boy behind a girl?

Simultaneous Verbal Task

- Simultaneous processing using verbal content
- Who is this song about?

My momma’s daddy was his oldest son.

Jack A. Naglieri, Ph.D.  George Mason Univ, Fairfax, VA 22030.  naglieri@gmu.edu

Numbers from 1 to 100

How is ... Simultaneous processing facilitated by this worksheet?
Simultaneous Processing at Work!

Simultaneous Processing at Work!

PASS Theory: Simultaneous

Simultaneous Processing
- Relate separate pieces of information into a group
- See how parts related to whole
- Recognize patterns

Examples of classroom problems related to simultaneous processing:
- Difficulty comprehending text
- Difficulty with math word problems
- Trouble recognizing sight words quickly
- Trouble with spatial tasks
- Often miss the overall idea
PASS Theory: Successive

Successive processing is a basic neurocognitive ability which we use to manage stimuli in a specific serial order.
- Stimuli form a chain-like progression
- Stimuli are not inter-related

Word Series

The child repeats a series of words in the same order the examiner says them.

1. Wall-Car
2. Shoe-Key
3. Dog-Car-Girl
4. Cow-Wall-Car-Girl
5. Cow-Dog-Shoe-Wall-Man-Car-Girl-Key-Book

Sentence Repetition (Ages 5-7) or Sentence Questions (Ages 8-17)

- Sentence Repetition
  - Child repeats sentences exactly as stated by the examiner such as:
  - The red greened the blue with a yellow.
- Sentence Questions
  - Child answers a question about a statement made by the examiner such as:
  - The red greened the blue with a yellow. Who got greened?
• Visual Digit Span subtest allows for a Visual Auditory comparison

Visual-Auditory Comparison

<table>
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<tr>
<th>Sound Type</th>
<th>Visual Span</th>
<th>Auditory Span</th>
<th>Difference between span</th>
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</table>

Successive

The sequence of the sounds is emphasized in this work sheet.

Learning Math Facts

\[
\begin{align*}
8 + 9 &= 17 \\
8 + 9 &= 17 \\
8 + 9 &= 17 \\
\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow
\end{align*}
\]
PASSTheory: Successive

Successive Processing
- Use information in a specific order
- Follow instructions presented in sequence

Examples of classroom problems related to Successive Processing:
- Trouble blending sounds to make words
- Difficulty remembering numbers in order
- Reading decoding problems
- Difficulty remembering math facts when they are taught using rote learning (4 x 5 = 20)

Components of a Thorough Assessment

Step 1: History
Step 2: Assess Impairment (RIS, EF, CEF, and Risk [RISE])
Step 3: Broad Spectrum: Conners CBRS or Conners EC
Step 4: Decide on Narrow Spectrum Questionnaires:
  - Disruptive Problems: Conners 3
  - Non-Disruptive:
    - AES: 3
    - CDI: 2
    - CBI: Teacher Questionnaire
Step 5: Achievement & Ability Testing
Step 6: Resilience
Step 7: Personality

PASS Processing Scores

- ADHD
- ASD
- SLD

Planning, Simultaneous, Attention, Successive
Obtain a Thorough History

- Immediate and extended family risks.
- Pregnancy and delivery
- Infancy and toddlerhood (temperament)
- Preschool and school history
- Socialization
- Family relations
- Sleep, appetite and hygiene
- Past treatments or educational services
- Discipline
- Situational problems

Evaluate Impairment, Risk, Strengths & Executive Function

Why is the assessment of impairment critical to a comprehensive evaluation??
An exhaustive review of the literature demonstrates that the relationship between symptoms and functioning remains unexpectedly weak and often bidirectional (McKnight and Kashdan, 2009).

Need

- There is a clear need to measure "impairment" when using the IDEIA, Diagnostic and Statistical Manual of the American Psychiatric Association (DSM) or the International Classification of Diseases (ICD) as a guide to eligibility determination and/or diagnosis.

So what is impairment?
Why is the assessment of impairment critical to a comprehensive evaluation?

Why is direct observation (e.g., FuBA) so critical for school-based assessment?

Impairment is the reduced ability to meet the demands of life because of a psychological, physical, or cognitive condition.

Symptoms vs. Impairment

Impairment is not the same as symptoms:

- Symptoms are physical, cognitive, or behavioral manifestations of a disorder.
- Impairments are the functional consequences of these symptoms.

Inattention vs. Difficulty completing homework.
How does impairment differ from adaptive behavior?

**IMPAIRMENT VS. ADAPTIVE BEHAVIOR**

A skill deficit occurs when a person does not know how to perform an everyday task, whereas a deficit in performance occurs when an individual has acquired a skill, yet does not seem to use it when needed.

(Ditterline & Oakland, 2009)

**IMPAIRMENT VS. ADAPTIVE BEHAVIOR**

Thus, while measures of adaptive behavior emphasize the presence of adaptive skills in daily functioning, measures of functional impairment tend to emphasize the outcome of a behavior or the performance of an individual rather than the presence or absence of the skill.

(Ditterline & Oakland, 2009; Dumas et al., 2010; Gleason & Caster, 2012)
Adaptive Behavior vs. Impairment

Skill vs. Performance

Do you know HOW to? vs. Do you ACTUALLY do it?

Adaptive Behavior vs. Impairment

Using utensils vs. Not using utensils to eat

Symptoms vs. Impairment

Impairment can exist absent of formal diagnosis. (Balas et al., 2013; Wille et al., 2008)

In one study 14.2% of a sample of children were significantly impaired without a formal diagnosis. (Angold et al., 1999)
**Relationship Between the Rating Scale of Impairment and Other Measures**

**Consequences of inattention**
- Conditions under which problems with consequences are observed
  - Delayed
  - Infrequent
  - Unpredictable
  - Lacking saliency

**Todd Finds a Path**
ADHD is a developmental disability with a childhood onset that typically results in a chronic and pervasive pattern of impairment in school, social and/or work domains, and often in daily adaptive functioning.

What is ADHD?

ADHD is a biopsychosocial condition characterized by core symptoms of inattention, hyperactivity and impulsivity leading to/interacting with cognitive 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
Inattention

• Conditions under which inattention is observed:
  • Repetitive
  • Effortful
  • Uninteresting
  • Not chosen

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 cue-less!

Poor Self-regulation

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

Psychiatric Concerns

- Antisocial personality disorder (7-18%)
- Substance use disorders: Alcohol (32-53%), Marijuana (15-21%), Other (8-32%)
- Dysthymia (19-37%)
- Major Depression (16-31%)
- Bipolar Disorder (0-6%)
- Learning Disabilities (0-30%)
- Anxiety (0-20%)
Emerging Personality Disorders in Teens With ADHD

- Anti-social personality (22%)
- Passive aggressive personality (19%)
- Borderline personality (14%)
- Histrionic (11%)
- Avoidant (11%)

(Barkley et al, 1998)

Personality Issues in Teens With ADHD

- Pessimistic, negative world view
- External locus of control
- Self-centered style
- Chaotic life-style
- Disorganized
- Introversive
- Passive

(Robin et al, 1998)

These personality issues comprise 55% of adults with ADHD vs. only 12% of the unaffected population
Behavior Manifestations

• Trouble focusing/concentrating
• Distractible/sidetracked
• Trouble finishing tasks
• Themes of intense frustration
• Underachievement

Behavior Manifestations

• Poor organization and planning
• Procrastination
• Mental/physical restlessness
• Impulsive decision making
• Frequent impulsive job changes
• Poor academic grades for ability
• Chronic lateness
• Frequently lose/misplace things

Work and School Concerns

• Poor self-regulation
• Can’t sustain attention to paperwork
• Trouble staying alert and focused
• Poor organization and planning
• Procrastination
• Poor time management
• Subjective sense of restlessness
Work and School Concerns

- Impulsive decision making
- Unable to work well independently
- Trouble following directions
- Change jobs impulsively
- Often late
- Forgetful
- Poor self-discipline.

Interpersonal Concerns

- Impulsive comments to others
- Quick to demonstrate emotion
- Stress intolerance
- Poor adherence to obligations
- Viewed by others as immature
- Talk excessively/listen poorly
- Problems sustaining friendships and relationships
- Miss social cues

Adaptive Behavior Problems

- Trouble with financial matters including checkbooks, money management, debt, and impulsive spending
- Trouble organizing/maintaining the home
- Spouse may feel overburdened
- Inconsistent/unreliable
- Driving problems
- Habit and abuse problems
Emotional Problems

- Immaturity (50%)
- Low frustration tolerance
- Over-reaction to situations
- Poor self-esteem
- Demoralization

Executive Function

- We found more than 30 definitions of EF(s).
- Executive function(s) has come to be an umbrella term used for many different abilities, including planning, working memory, attention, inhibition, self-monitoring, self-regulation and initiation carried out by pre-frontal areas of the frontal lobes.
What is/are Executive Function(s)

There is no formal accepted definition of EF

- We typically find a vague general statement of EF (e.g., goal-directed action, cognitive control, top-down inhibition, effortful processing, etc.).
- Or a listing of the constructs such as
  - Inhibition,
  - Working Memory,
  - Planning,
  - Problem-Solving,
  - Goal-Directed Activity,
  - Strategy Development and Execution,
  - Emotional Self-Regulation,
  - Self-Motivation

Does Experience Shape EF?

- The Family Life Project has demonstrated that poverty is associated with elevated cortisol in infancy and early childhood.
- This association is mediated through characteristics of the household.
- Parenting sensitivity mediates the relationship between poverty and stress physiology.
- In combination parenting sensitivity and elevated cortisol mediate the association between poverty and poor EF in children.

What Neural Activities Require EF?

- Those that involve planning or decision making.
- Those that involve error correction or troubleshooting.
- Situations when responses are not well-rehearsed or contain novel sequences of actions.
- Dangerous or technically difficult situations.
- Situations that require the overcoming of a strong habitual response or resisting temptation.
What is Executive Function(s)

1. Barkley (2011): “EF is thus a self-directed set of actions” (p. 11).
2. Dawson & Guare (2010): “Executive skills allow us to organize our behavior over time” (p. 1).
3. Delis (2012): “Executive functions reflect the ability to manage and regulate one’s behavior” (p. 14).

What is Executive Function(s)

5. Gioia, Isquith, Guy, & Kenworthy (2000): “a collection of processes that are responsible for guiding, directing, and managing cognitive, emotional, and behavioral functions” (p. 1).

What is Executive Function(s)

7. Roberts & Pennington (1996): EF “a collection of related but somewhat distinct abilities such as planning, set maintenance, impulse control, working memory, and attentional control” (p. 105).
What is Executive Function(s)

6. Stuss & Benson (1986): “a variety of different capacities that enable purposeful, goal-directed behavior, including behavioral regulation, working memory, planning and organizational skills, and self-monitoring” (p. 272).

7. Welsh and Pennington (1988): “the ability to maintain an appropriate problem-solving set for attainment of a future goal” (p. 201).

What is Executive Function(s)

10. McCloskey (2006): “a diverse group of highly specific cognitive processes collected together to direct cognition, emotion, and motor activity, including ... the ability to engage in purposeful, organized, strategic, self-regulated, goal directed behavior” (p. 1)

“think of executive functions as a set of independent but coordinated processes rather than a single trait” (p. 2).

What is Executive Function(s)

10. Lezak (1995): “a collection of interrelated cognitive and behavioral skills that are responsible for purposeful, goal-directed activity.”

11. “how and whether a person goes about doing something” (p. 42).

12. Luria (1966): “... ability to correctly evaluate their own behavior and the adequacy of their actions” (p. 227).
Executive Functions

The executive system is a functional cognitive system in psychology that controls and manages other cognitive processes. It is also referred to as the executive function, executive functions, supraisory attentional system, or cognitive control.

This aspect of cognitive functioning and communication provides a uniquely different perspective from the other elements that are responsible for planning, organizing, flexibility, decision making, the inhibition, integration, separation, and shifting among sensory information.
And Finally. . .

A NICHD panel in 1994 identified 33 EFs by consensus!

The Top Six Were:

- Self-regulation
- Sequencing of behavior
- Flexibility
- Response inhibition
- Planning
- Organization of behavior
Three Categories of Theories

- Regulators that control
- Abilities (cognitive processes)
- Behaviors

Executive Function(s)

Given all these definitions of EF(s) we wanted to address the behavioral question...

Executive Functions ... or
Executive Function?
ITEM FACTOR ANALYSES – PART 1

• For the first half of the normative sample for Parent, Teacher and Self ratings' item scores (90 items) was analyzed using exploratory factor analysis

• The scree plots and the very simple solution criterion both indicated that only one factor.

• The ratio of the first and second eigenvalues was greater than four for all three forms, which indicated a one factor solution.

SCALE FACTOR ANALYSES – PART 2

• Using the second half of the normative sample EFA was conducted using raw scores for the Attention, Emotion Regulation, Flexibility, Inhibitory Control, Initiation, Organization, Planning, Self-Monitoring, and Working Memory scales

• Both the Kaiser rule (eigenvalues > 1) and the Eigen value Ratio criterion (> 4) unequivocally indicated one factor.
Item Factor Analyses – Part 2

Scale level factor analysis clearly indicated that one factor was the best solution.

Table IV. Eigenvalues of the CFQ Scales Correlations

<table>
<thead>
<tr>
<th>Scale</th>
<th>Eigenvalues</th>
<th>Parent</th>
<th>Teacher</th>
<th>Self</th>
<th>Parent</th>
<th>Teacher</th>
<th>Self</th>
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Exploratory Factor Analyses

Conclusion:

When using parent (N = 1,400), teacher (N = 1,400), or self-ratings (N = 700) based on behaviors observed and reported for a nationally representative sample (N = 3,500) aged 5 to 18 years Executive Function not functions is the best behavioral term to use.
EF as a Mediator of Ability and Knowledge

- Ability: The skills we use to acquire and manipulate knowledge to solve problems. Also referred to as intelligence.
- Knowledge: Everything we learn in life. Also referred to as achievement.
- Executive Function: How efficiently or skillfully you do what you decide to do.

Why Does Executive Function Matter?

EF is essential for success in daily living including:

- Academic & occupational functioning
  - For more information see: Best et al., 2009; Miller et al., 2012; Vallente et al., 2013
- Interpersonal problems
  - For more information see: Sprague et al., 2011; De Pauli et al., 2013
- Physical health
  - For more information see: Hall et al., 2006; Fedrowitz et al., 2014
- Mental health
  - For more information see: Willett et al., 2005; Bora et al., 2009; Mestholm-Gatey et al., 2014

Group Differences: ADHD

<table>
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<tr>
<th>Group</th>
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<th>Teacher</th>
<th>Self-Report</th>
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Group Differences: ASD

![Graph showing group differences for ASD]

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<th>Group Differences: Learning Disabilities</th>
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<td>![Graph showing group differences for learning disabilities]</td>
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<table>
<thead>
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<th>Group Differences: Mood Disorders</th>
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<td>![Graph showing group differences for mood disorders]</td>
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Table 4.2: Differences Between ASD and Matched General Population Samples: CDS-Full Scale

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<tr>
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Table 4.3: Differences Between LD and Matched General Population Samples: CDS-Full Scale

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<td>Matched</td>
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Table 4.4: Differences Between Mood Disorders and Matched General Population Samples: CDS-Full Scale

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Table 4.5: Differences Between Mood Disorders and Matched General Population Samples: CDS-Full Scale

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<tr>
<td>Control</td>
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### CEFI Gender Differences: Parent Raters

**Girls are Smarter than Boys**

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### CEFI Gender Differences: Teacher Raters

**Girls are Smarter than Boys**

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<td>14.4</td>
<td>350</td>
<td>122.9</td>
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### Gender Differences: Abilities Associated With EF

- Boys
- Girls
EF Impacts Performance on Intelligence, Achievement and Neuropsychological Tests

- Data from the Neurology, Learning and Behavior Center in Salt Lake City, UT
- Children given the CEFI, WISC-IV (N = 43), CAS (N = 62), and the WJIII achievement (N = 58) as part of a typical test battery.

### EF Behaviors and Intelligence

<table>
<thead>
<tr>
<th>CEFI</th>
<th>FS</th>
<th>VC</th>
<th>PR</th>
<th>WM</th>
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Note: All correlations were corrected for range instability.

### EF Behaviors and Neuropsychological Abilities

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<td>6.0</td>
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</table>

Note: All correlations were corrected for range instability.
EF Behaviors and Achievement

We are social beings.
What Benefits Do We Derive From Socialization?

- Support
- Survival
- Affiliation
- Pleasure
- Procreation
- Knowledge
- Friendship

The social development of autistic children is qualitatively different from other children.

In normal children perceptual, affective and neuroregulatory mechanisms predispose young infants to engage in social interaction from very early on in their lives.
Socialization Begins Early
Reina and Her Mother

Adrian, my seatmate on a recent flight.

Hello!
Adrian

You look like an interesting guy.

Adrian

See what I can do! Wanna take me home?
Kanner’s Description (1943)

- first physician in the world to be identified as a child psychiatrist
- founder of the first child psychiatry department at Johns Hopkins University Hospital
- Wrote Child Psychiatry (1935), the first English language textbook to focus on the psychiatric problems of children.

---

Kanner’s Description (1943)

- His seminal 1943 paper, “Autistic Disturbances of Affective Contact”, together with the work of Hans Asperger, forms the basis of the modern study of autism.
- Leo Kanner was the Editor for Journal of Autism and Developmental Disorders, then called Journal of Autism and Childhood Schizophrenia
Kanner’s Description (1943)

- Inability to relate to others
- Disinterest in parents and people
- Language difficulties
- Fascination with inanimate objects
- Resistance to change in routine
- Purposeless repetitive movements
  - A wide range of cognitive skills
  - Where they possess an innate inability for emotional contact

---

Core DSM and ICD Core ASD Symptoms in All Ages

- Impaired social relations.
- Impaired communication skills.
- Impaired behavior.

---

Research Demonstrated Core Factors of Challenges In ASD

- Social/Communication Deficits
- Atypical Behaviors
- Poor Self-regulation
Symptoms Present Before 24 Months

Children with ASD Struggle to:
- Orient to name
- Attend to human voice
- Look at face and eyes of others
- Imitate
- Show objects
- Point
- Demonstrate interest in other children

Symptoms Present Before 36 Months

Children with ASD:
- Use of other’s body to communicate or as a tool
- Stereotyped hand/finger/body mannerisms
- Ritualistic behavior
- Failure to demonstrate pretend play
- Failure to demonstrate joint attention

Autism is now referred to as a spectrum disorder in which individuals can present problems ranging from total impairment to near reasonable functioning.
In a Spectrum Disorder genetic and phenotypic factors predispose certain individuals to express certain Central Nervous System vulnerabilities leading to poorly adapted variations in development and behavior.

In a Spectrum Disorder all symptoms are considered relevant to the extent they present in each disorder. Thus a symptom is not exclusive to a disorder.

The form that a Spectrum Disorder assumes is determined by its composite symptoms. These symptoms often have complex relationships.
Autism Spectrum Rating Scales

Multi-informant measure designed to identify symptoms, behaviors, and associated features of Autism Spectrum Disorder (ASD) in children and adolescents aged 2 to 18 years.

ASRS Validity for ages 2-5 Parents
ASRS Validity: Ages 6-18 Parents

Anxiety and Depression

Childhood Depression
- Increasing each successive generation
- Exacerbated by a variety of familial and environmental factors
- Appears time limited but in reality isn't
- No critical diagnostic test
- Highly prevalent in the most vulnerable youth
- Strong familial transmission
Anxiety and Depression: Two Sides of the Same Coin

• Similar parts of the brain are implemented.
• Similar neurotransmitter systems.
• Similar medicines used to treat both.
• Similar types of counseling used to treat both.

Are Depression and Anxiety Traits or States?

Is This Depression?

• Sadness
• Listlessness
• Lack of energy
• Duration of several months
• Prior to age 7
• These are reported in 10% of children!
Is This Depression?

[Handwritten note:]

- 5/6/99
- Dealing with
- I felt hopeless.
- I felt sad.
- I felt angry.
- HELP
- [Drawing of a sad face]
- B + me
Is This Depression?

Depression represents a continuum of difficulty from mild variations in affect to severe mood swings and accompanying impairment.

During childhood and adolescence as many as one in five youth will experience a depressive episode.
The numbers of depressed youth remain constant but individuals cycle above and below diagnostic symptom thresholds.

Major depression remits spontaneously in 50-80% within one year.

Seventy to ninety percent will experience a second major depressive episode within 5 years.
It is estimated that one out of every five people will struggle with depression on a reoccurring basis.

Depression

- May be represented as an affect or an external representation of the subjective experience of emotion.
- May be a mood subjective internal emotion.
- May be a syndrome consisting of a cluster of incapacitating symptoms and behaviors.

Characteristics of Childhood Depression

- Sadness
- Boredom
- Low self worth
- Guilty feelings
- Social isolation
Characteristics of Childhood Depression
- Impaired school work
- Chronic fatigue
- Low energy level
- Sleep problems
- Appetite problems
- Suicidal thoughts or actions

Most Predictive Symptoms of Youth Depression
- Feeling unloved
- Inability to derive pleasure
- Excessive guilt
- Depressed mood
- Negative view of self, world and future (the cognitive triad)

Children's Depression Inventory 2™ (CDI 2)
Comprehensive multi-rater assessment of depressive symptoms in children and adolescents from ages 7 to 17, which offers the flexibility of application in either clinical or educational settings.
Scale Structure: Parent and Teacher

Total Score
- Parent: 17 items
- Teacher: 12 items

Emotional Problems
- Parent: 9 items
- Teacher: 5 items

Functional Problems
- Parent: 8 items
- Teacher: 7 items

- 4-point Likert-type rating: 0=“Not at All”, 3=“Much or Most of the Time”

Scale Structure: Self-Report (Full Length)

Total Score
- All 28 items

Emotional Problems
- 15 items

Negative Mood/Physical Symptoms
- 9 items

Negative Self-Esteem
- 6 items

Functional Problems
- 13 items

Interpersonal Problems
- 5 items

Ineffectiveness
- 8 items

CDI-2 Self-Report

Each sentence is given either 0, 1, or 2 points
Types of Anxiety in Children

- **Separation anxiety**: Very anxious and upset when parted from parents and caregivers; refusal to attend camp, sleepovers, or play dates; worry that bad things will happen to self or loved ones while separated.
- **Social anxiety**: Strong fear of social situations; very anxious and self-conscious around others; worry about being judged or humiliated.
- **Specific phobia**: Severe, irrational fear set off by a situation or thing, such as thunderstorms, worry about vomiting, or insects.

Why Are Some Children More Vulnerable to Anxiety?

- Biological factors, such as genes and brain wiring
- Psychological factors, such as temperament and coping strategies
- Environmental factors, such as anxious parenting or troubling early childhood experiences and environment.
**Multidimensional Anxiety Scale for Children 2nd Edition (MASC 2)**

- Comprehensive multi-rater assessment of anxiety dimensions in children and adolescents aged 8 to 19 years.
- Distinguishes between important anxiety symptoms and dimensions that broadband measures do not capture.

### MASC 2 Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Separation Anxiety/Phobia</th>
<th>Social Anxiety</th>
<th>Test Performance</th>
<th>Obsession &amp; Compulsions</th>
<th>Physical Symptoms</th>
<th>Panic</th>
<th>Harm Avoidance</th>
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<tr>
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<td>Test Performance/Total</td>
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<td>Physical Symptoms/Total</td>
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<td>Panic/Total</td>
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</tbody>
</table>
Organizing the Data

- A day in the life
- Ability/Knowledge/Skill
- Take a chronological perspective.
- Risk and Protective factors
- Determining eligibility
- Suggesting possible diagnoses
- Recommending needs
- Considering continuum of services

ADOPT A LEARNING TO RIDE A BICYCLE MINDSET!

Todd: A Resilience Story
Josh

- First grade
- Supportive home and school
- Good self-esteem
- Good behavior
- Weak processing blocks
- Strong thinking blocks

Matthew

- Fifth grade
- Attention and impulse problems
- Supportive home and school
- Good emotional development
- Adequate processing blocks
- Strong thinking blocks

Ann

- Eighth grade
- Strong foundational blocks
- Strong processing blocks
- Problems thinking with language
- Adequate thinking with images and strategies
Stella

- Strong emotional, behavioral and environmental blocks
- Weak attention block
- Adequate language processing block
- Weak motor and visual blocks
- Weak thinking with images block
- Adequate strategies and thinking with language blocks

Key Goals of Intervention

- Instill hope and empowerment
- Educate
- Reframe
- Build self-esteem and self-acceptance

Key Goals of Intervention

- Form a partnership
- Reduce discouragement through setting realistic goals
- Address and rewrite negative scripts
- Focus on strengths
- Build resilience
EF Interventions

Can strategic, instructional interventions provide remedial and compensatory support for children with EF deficits?

Cognitive Strategy = EF Instruction

- A strategy is a procedure that the learner uses to perform academic tasks
- Using a strategy means the child thinks about ‘how you do what you do’
- Successful learners use many strategies.
- Some of these strategies include visualization, verbalization, making associations, chunking, questioning, scanning, using mnemonics, sounding out words, and self-checking and monitoring.

My Granddaughter Hones Her EF Skills
My Granddaughter Hones Her EF Skills

Practice Pays Off!

Cognitive Instructional Methods
Tools of the Mind

http://www.hoagiesgifted.org/eric/e638.html

http://nichcy.org/research/ee/learning-strategies
Helping Kids Who Struggle With Executive Functions

Activities Guide: Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence

Classroom Accommodations for Executive Functioning Issues
Teaching Children to use EF

- Helping Children Learn Intervention Handouts for Use in School and at Home, Second Edition
  By Jack A. Naglieri, Ph.D., & Eric B. Pickering, Ph.D.,
  Spanish handouts by Tulio Otero, Ph.D., & Mary Moreno, Ph.D.

http://www.ncld.org/at-school/especially-for-teachers/effective-teaching-practices/strategic-instruction-model-sim-how-to-teach-how-to-learn
Steps to Strategic Instruction:

- **Describe the strategy.** Students obtain an understanding of the strategy and its purpose—why it is important, when it can be used, and how to use it.
- **Model its use.** The teacher models the strategy, explaining to the students how to perform it.
- **Provide ample assisted practice time.** The teacher monitors, provides cues, and gives feedback. Practice results in automaticity so the student doesn’t have to “think” about using the strategy.
- **Promote student self-monitoring and evaluation of personal strategy use.** Students set standards for the strategy if they see how it works for them.
- **Encourage continued use and generalization of the strategy.** Students are encouraged to try the strategy in other learning situations.

Benefits of Strategy Instruction

- Students trust their minds
- Students know there is more than one right way to do things
- They acknowledge their mistakes and try to rectify them
- They evaluate their products and behavior
- Memories are enhanced
- Learning increases
- Self-esteem increases
- Students feel a sense of power
- Students become more responsible
- Work completion and accuracy improve
- Students develop and use a personal study process
- They know how to “try”
- On-task time increases: students are more “engaged”
Five keys to successful management of ADHD

• Make tasks interesting
• Make payoffs valuable
• Adjust expectations for change
• Allow more trials to mastery
• Allow more time for change

The consequence is worse than the symptom:

NEGATIVE REINFORCEMENT

Why do some with ADHD thrive while others barely survive?
Symptom relief is not synonymous with changing long term outcome.

Psychosocial Interventions for ADHD

- Environmental manipulation of the physical plant
- Environmental manipulation of consequences
- Modification of cognitive function

They are/can be effective symptom relievers but they may not change long term outcome.
Is Counseling for ADHD Non-Traditional?

- Active role of therapist
- Cognitive behavioral model
- Similar to working with individual's with neurological conditions. Therapist takes an active even directive role.
- Involve support system
- Offer guidance and advice.

“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
Keys for the Education of Children With ADHD

• MAKE TASKS INTERESTING
• MAKE PAYOFFS VALUABLE
• ALLOW MORE TRIALS OVER LONGER TIME PERIODS
• FOCUS ON ASSETS
• ADOPT A LONG-TERM PERSPECTIVE

Cognitive Strategies For the Classroom

• Monitoring
• Evaluation
• Cuing
• Problem solving
• Communication
• Attribution

Management Strategies For the Classroom

• Adjust expectations
• Everyone succeeds every day
• Prepare for changes
• Seating in rows
• Incompetence versus non-compliance
• Mix high and low interest tasks
• Simple, single directions
What Qualities Define the Best School for Students With ADHD?

Structure, Stimulation, Repetition or Novelty?

The Ideal Teacher for ADHD?

"One will take the Ms. Whedon. I'm in an accommodative school."
“Make the work interesting and the discipline will take care of itself”

E. B. White

What teachers want from children with ADHD

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Management Strategies For the Classroom

- Adjust expectations
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- Simple, single directions

The Art of Educational Commands

<table>
<thead>
<tr>
<th>START</th>
<th>STOP</th>
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</thead>
<tbody>
<tr>
<td>ALPHA</td>
<td></td>
</tr>
<tr>
<td>Place your feet on the floor. (Best)</td>
<td>Take your feet off the desk.</td>
</tr>
<tr>
<td>BETA</td>
<td></td>
</tr>
<tr>
<td>Do it</td>
<td>Don't do it!</td>
</tr>
<tr>
<td>(Least effective)</td>
<td></td>
</tr>
</tbody>
</table>

Management Strategies For the Classroom

- Transitions
- Consequences
- Consistent routine
- Allow non-disruptive movement
- Teacher contact
- Ignore minor disruptions
- An efficient system for homework
Management Strategies For the Classroom

• Manage negative reinforcement
• Use response cost
• Use differential attention
• State and review rules
• Predictable schedule
• Maintain home-school communication
• Don’t be a martyr

The Power of Education?

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)
“The secret of education lies in respecting the student”

Ralph Waldo Emerson

Five Strategies to Reduce Teen and Young Adult Risk Taking Behavior

• Support positive behaviors of non-risk-taking individuals. Declines in risk-taking mean that the share of students taking no risks has increased. These youth need support and expanded opportunities to continue making responsible and healthy decisions as they mature.

• Target efforts to reduce specific risk behaviors toward multiple-risk students. Recent public health and policy efforts to reduce the prevalence of key risk behaviors, such as smoking or violence, cannot address these behaviors in isolation from other risk-taking.

• Encourage positive behaviors of risk-taking youth, such as time spent on extracurricular or faith-based activities. These behaviors connect students to adults and social institutions and offer opportunities to prevent risk-taking among some students or reduce risk-taking among others.

• Expand efforts to reach multiple-risk youth in nontraditional settings. Teen participation in settings such as the workplace, the criminal justice system, and faith-based institutions offers innovative opportunities for health services and education programs and the development of personal relationships with positive adult role models that can reduce risk-taking.

• Take new steps to reduce risk-taking among Hispanic students. Further research is needed to better understand both risk-taking and development of this growing group of youth. Programs that are responsive and sensitive to the current ethnic and social diversity of Hispanic youth need to be developed and implemented.

School Wide Programs

Focus on the whole student

Provide professional development for staff

Provide training for teachers, counselors, and administrators skills for implementation and continued program management, as well as ongoing support and guidance.

Use 1:1 Time Classroom Curriculum to foster learning

1:1 Time Classroom Curriculum is a targeted approach to ensure that all students, including those who struggle, are engaged and successful.

Create cultures of students

Provide opportunities for students to engage with their work and each other.

Hold regular teacher team meetings

Teacher teams meet weekly to discuss the social, behavioral, and academic needs of students.

Engage families in student learning

BARR works closely with families to understand the needs of students and provide appropriate support.

Engage administration

BARR works closely with school administration to ensure the success of students.

How BARR Works

School Wide Programs
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.

Teach Empathy By Practicing Empathy

• Are we saying or acting in a way that our children will be responsive to hearing us?
• Would we want anyone to speak to us the way we speak to our children?
• How would our children describe us at various times?
• How would we want our children to describe us?
Teach Empathy By Practicing Empathy

- Listen
- Validate
- Avoid preaching and lecturing
- Avoid judgments and accusations
- Put yourself in their shoes
- Change your negative scripts

Teach Responsibility By Encouraging Contributions

- Provide ample opportunity
- Focus on existing success
- Build islands of competence
- Allow the opportunity to witness concrete examples of success

Eric’s Experiment Part I
Eric’s Experiment Part II

Teach Decision Making and Problem Solving Skills That Reinforce Self-Discipline

• What’s my problem?
• What solutions are available?
• Which solution is the best?
• How can I implement each step of the solution?
• How did I do?

Offer Encouragement and Positive Feedback

• Become a charismatic adult
• Provide realistic appreciation
• Focus on building rather than tearing down
• Be available
Help Children Deal With Mistakes

• The fear of mistakes is a strong roadblock to developing a resilient mindset
• Mistakes are opportunities to learn
• Model the benefits of mistakes

The Mindset of a Resilient Child

• Optimistic and hopeful.
• Feel special and appreciated in the eyes of others.
• Set realistic goals and expectations.
• View mistakes, hardships and obstacles as challenges.
• Solve problems and make decisions.
• Internal locus of control.
• Believe you can and set out to solve problems.
• Possess empathy.

Adopt a Learning to Swim Mindset!
CONCLUSIONS

• Liabilities define where you may be but assets tell me where you might go in life.
• An early history of developing competence, along with supportive, consistent care, serves as a powerful and enduring buffer throughout childhood and increases probability of resilience.
• We have come to appreciate that biology is not destiny but does impact probability.
• The brain and the mind have a complicated relationship.
• Children exhibit two kinds of behavioral and emotional challenges.
• A diagnosis is a good first step but not a good place to end.
• Ability, knowledge and skill are not the same.
• There are more similarities than differences in many diagnoses.
• Children today are more vulnerable than ever before.
• There is much we can do to stress inoculate children to live a resilient life.

It must never come to this!

Or this!
Goldstein’s Axiom

Through intelligent and ethical educational and therapeutic practices, we can foster self-discipline, mental health, resilience and build educational proficiency in all children without stealing away their dignity and hope.

Creating a masterpiece or just chipping away?

In Their Own Words