



### Goals for This Session

- Review the nature, definition and challenges of ADHD in the early adolescent years.
- Review the known/proven predictors of positive outcome for youth with ADHD transitioning into adulthood.
- Discuss the “New Normal” for all teens and how that impacts teens with ADHD.
- Explain the role of resilience as a critical variable impacting outcome.
- Offer guidelines for parents raising teens with ADHD.

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### What is Attention Deficit Hyperactivity Disorder (ADHD)?

- ADHD appears to primarily involve a difference in the maturation of the the basal ganglia, cerebellum and the frontal lobes of the brain.
- Co-morbidity or co-occurrence of other developmental, emotional and behavioral conditions with ADHD often complicates our understanding of the core problem.
- The primary symptoms of ADHD (excessive impulsive, inattentive and restless behavior) leads to a nearly infinite number of consequences in every aspect of life.




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Current diagnostic criteria specify that ADHD involves difficulties with inattention and/or hyperactivity/impulsivity.

Researchers using statistical analyses have consistently found support for an inattention factor in both children and adults.

Findings have been mixed regarding whether hyperactivity and impulsivity reflect one or two dimensions.

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ADHD appears to be a condition stemming in part from inefficient operation of the brain relative to task and environmental demands leading to poor execution of behavior.

It is not a disease nor illness. It reflects an immaturity in the pace children develop self-control and self-discipline.

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Neither the level of impairment nor the life outcome for those individuals with ADHD is very well predicted by the diagnosis, symptoms or treatments.

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Symptom relief is insufficient to assure good adult outcome for ADHD.

Strengths not weaknesses are the best predictors of what all of our lives will be.

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The Symptoms of ADHD Lead to a Nearly Infinite Number of Consequences

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ADHD acts as a catalyst fueling other developmental and environmental risk factors.

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ADHD is a condition resulting from poor self-discipline, reflecting exaggeration of normal behavior.

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Self-discipline

- 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.

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Self-discipline

- 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.

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Children with poor self-discipline aren't clue-less

They are unfortunately often cue-less!

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Poor Self-discipline is synonymous with. . .

Poor Self-control

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Poor self-discipline leads to

Impulsive behavior

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Conditions under which inattention is observed:

- Repetitive
- Effortful
- Uninteresting
- Not chosen

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Conditions under which problems with consequences are observed:

- Delayed
- Infrequent
- Unpredictable
- Lacking saliency

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### Childhood Predictors of Adult Outcome

- Earlier studies found that co-occurring aggression, conduct problems and severity in ADHD symptoms in childhood predicted persistence of ADHD into adolescence and adulthood.
- Other longitudinal studies have also suggested socio-economic status (SES) as an important predictor for persistence of ADHD symptoms in children and outcome severity in early adolescence. However, this finding has not always been replicated.

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### Childhood Predictors of Adult Outcome

More recent studies focusing on larger cohorts of ADHD participants and a wider range of childhood risk factors reveal that other psychiatric comorbidities, oppositional defiant disorder, anxiety disorder and family factors including maternal psychopathology and psychosocial adversity significantly predicted persistence of ADHD in adolescence and adulthood.

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Childhood Predictors of Adult Outcome

- Moving beyond behavioral and family factors, the predictive values of neurocognitive functions such as working memory, inhibition and response variability in ADHD persistence have been reported in a few studies, although a limited range of cognitive measures and short follow-up intervals were used. Initial evidence in children suggests that cognitive functions in early childhood may predict future ADHD symptoms or diagnosis a few years later.
- General cognitive ability (IQ) in early childhood predicted later ADHD symptoms measured in middle childhood (age 7.5) or in early adolescence (age 14) but this was not replicated in another follow-up study in adolescence (ages 12-18), which found childhood IQ and social class to predict conduct disorder outcomes rather than ADHD scores or diagnosis.

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Childhood Predictors of Adult Outcome

- Overall the findings across these studies have been mixed, perhaps reflecting differences in study design, variables examined and the definitions of ADHD applied.
- Furthermore, none of these studies examined whether cognitive impairments in children with ADHD predicted future ADHD outcome in older adolescents and young adults.
- Further studies are therefore needed to clarify the predictors of persistence and remission of ADHD.

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Childhood Predictors of Adult Outcome

- The severity of childhood ADHD symptoms, as reported by parents, is a strong predictor for ADHD outcome at follow up.
- Co-occurring symptoms, such as social and emotional functioning or oppositional behaviors rated by parents, also predicted more severe symptoms and impairment at follow up. However, the predictive value of these co-occurring symptoms became trivial once childhood ADHD symptoms were controlled for, suggesting that the co-occurring problems are related to the severity of ADHD symptoms.

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### Childhood Predictors of Adult Outcome

- Teacher ratings of childhood ADHD symptoms and co-occurring symptoms does not predict parent interview-based ADHD symptoms or diagnosis at follow up.
- The validity of teacher reports in older children or adolescents may also be compromised.
- The stability of ADHD symptoms is also evident from objective actigraph measures of activity level, which are not subject to rater bias effects.

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### My View of the Future of the ADHD Diagnosis

- Inattentive Type will shift to Sluggish Cognitive Tempo.
- The Hyperactive-Impulsive type will be renamed as an Impulse Control Disorder of Childhood.
- A better set of adult symptoms will be used.
- SPECT and other scanning methods will not be used.
- EEG and other quantified measures will not be used.
- An fMRI FNCI may find a place when sufficient data exists.
- The diagnosis will shift from symptom count thresholds to an algorithm based threshold.
- Parent and Teacher reports based on well validated questionnaires will continue to be the primary path of diagnosis.
- Concepts of efficient self-regulation and executive functioning (strategy behaviors) may find their way into the diagnostic criteria.

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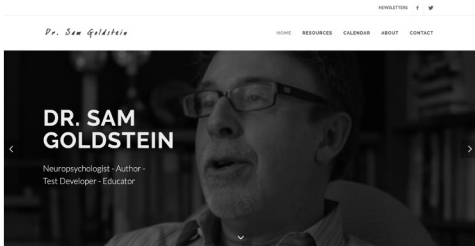
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## Questions?

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