Current Trends in The Diagnosis and Treatment of ADHD in Adults

TEDx
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The Power Of Resilience

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Relevant Disclosure

- Editor in Chief, Journal of Attention Disorders
- Co-author of
  - Comprehensive Executive Functioning Inventory-Child and Adult
  - Cognitive Assessment System –2nd Edition
  - Co-author Attention Disorders in Children 1st and 2nd Editions
  - Co-author Handbook of ADHD in Adults
  - Co-Editor Handbook of Executive Functioning
  - Co-Editor Handbook of Intelligence and Achievement Testing
  - Co-author Raising a Self-Disciplined Child

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Goals for This Session

- Review the trends in ADHD diagnosis and treatment.
- Offer an overview from a neuropsychological perspective of ADHD.
- Offer a perspective of ADHD as a primary impairment in the development of self-discipline.
- Discuss child predictors of ADHD outcome in adulthood.
- Discuss current trends in diagnosis and treatment.
- Offer my thoughts on ADHD 50 years from now.

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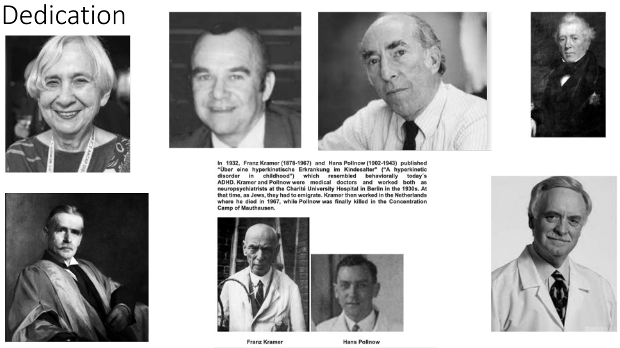
Dedication



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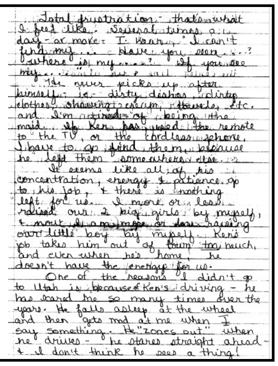
Why must we continue to evolve our view of ADHD?



Total frustration - that's what I feel like. Several times a day - or more - I hear, "I can't find my... Have you seen...? Where is my...? If you see my... [illegible]

He never picks up after himself - ie - dirty dishes, dirty clothes, shaving crap, towels, etc. and I'm tired of being the maid. If Ken has used the remote to the TV, or the cordless phone, I have to go find them, because he left them somewhere else.

It seems like all of his concentration, energy & patience go to his job, & there is nothing left for us. I more or less raised our 2 big girls by myself, & now I am more or less raising our little boy by myself. Ken's job takes him out of town too much, and even when he's home, he doesn't have the energy for us.

One of the reasons I didn't go to Utah is because of Ken's driving - he has scared me so many times over the years. He falls asleep at the wheel and then gets mad at me when I say something. He "zones out" when he drives - he stares straight ahead - & I don't think he sees a thing!

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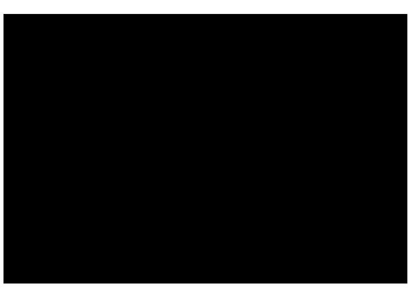
In Their Own Words



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Scientists have long been aware of what is now known as "ADHD." The condition was initially cited by German physician Melchior Weikard in 1775. In his text book, *Der Philosophische Arzt* (The Philosophy of Medicine), he wrote of patients who "are mostly reckless, often copious considering imprudent projects, but they are also most inconstant in execution."

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In 1798, Scottish physician Alexander Crichton wrote an early treatise on psychological disorders in which he described what he called "mental restlessness."

104 years later, British pediatrician George Still presented a series of lectures on the topic of "abnormal psychical conditions in children" who exhibited aggressive or defiant behavior and were unable to focus their attention for any length of time.

He concluded that the condition was "a defect of moral consciousness which cannot be accounted for by any fault of environment." In the late 1930s, psychologists began treating what was then known as "hyperkinesis" with amphetamines. For decades, it was described as "minimal brain dysfunction" and "hyperkinetic reaction of childhood."

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When Keith Conners first published his findings, diagnoses of ADHD were rare and treatments were not always effective. Since then, rates of ADHD diagnoses have increased dramatically.

For example, in 1987, just a half a percent of U.S. children between the ages of 6 and 17 were being medicated for ADHD. By 2014, the figure had grown to 7.5 percent.

In a presentation before a conference of ADHD specialists in December of 2013, Conners raised serious doubts about the "alarming increase in the rates of diagnosis."

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It is no coincidence that the skyrocketing rates of ADHD diagnoses have been happening at the same time that Big Pharma has been engaged in aggressive marketing to sell as many amphetamine-based medications as they are allowed to produce. In 2002, annual sales of prescription amphetamines were well under $2 billion. In 2015, that figure was nearly $13 billion. Total stimulant use has doubled in the last decade.

It is also estimated that a half a billion dollars is spent on the dark web for stimulants.

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Consider:

- If you are not depressed an anti-depressant will not make you happy.
- If you are not anxious and axiolytic will not make you calmer.
- If you are not schizophrenic an anti-psychotic will not give a better grasp on reality.
- But you can have no complaints about your capacity to pay attention and yet a stimulant will enhance your performance!

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But if our human ancestors (e.g. Homo Erectus) consumed a plant based product with a stimulant component:

- They slept less.
- They ate less.
- They were less fatigued.
- They moved more.
- And . . . . . .

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. . . they were more likely to survive!

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My First Assessment!

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Diagnosis and Treatment of ADHD in the United States: Update by Gender and Race

Kathleen A. Fairman, Alyssa M. Peckham, David A. Sclar

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https://doi.org/10.1177/1087054716688534

- Diagnoses of ADHD increased by 36% in adults and 18% in youth, and diagnosis + drug by 29% in female and 10% in male youths.
- ADHD diagnosis was 77% less likely among Black than White adults but 24% more likely among Black than White youths in 2012-2013. Conduct disorder (CD) in youths multiplied odds of diagnosis + drug by 3.31; interaction of Black race × CD by 3.78.
- Upward trends in ADHD diagnosis and treatment have continued but vary markedly by group.
- Studies of undertreatment/overtreatment are needed.

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Recent Developments

- Over a period of about two decades beginning in 1990, substantial upward trends in the rates of diagnosis and treatment for ADHD were observed in nationally representative samples of U.S. physician office visits obtained through the National Ambulatory Medical Care Survey.
- Several important developments have taken place in the last 20 years.
- These include the approval of several new ADHD drugs and formulations.
- The formation of the American Psychiatric Association (APA) *Diagnostic and Statistical Manual of Mental Disorders–5* Task Force in 2007, culminating in the publication of *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*; 5th ed.)
- Updated guidelines, from the American Academy of Pediatrics and from the American Academy of Family Practice in 2012 (adults) and 2014.

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Recent Developments

- These changes may have increased the number of cases diagnosed and treated for ADHD in several ways.
- First, the age criteria for diagnosis broadened, both in the *DSM-5* (symptoms no later than age 12 years vs. age 6 years in the *Diagnostic and Statistical Manual of Mental Disorders* and in the AAP guidelines (age 4-18 years in 2011 vs. 6-12 years in 2001.
- Second, the *DSM-5* guidelines require adults and adolescents to display only five ADHD symptoms, rather than the six required for a diagnosis in children.
- Finally, a description of ADHD symptomatology in those aged 17 years or older was added to the *DSM-5* for clarity.

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Recent Developments

- *Large increases in ADHD diagnosis and treatment among adults.* From 1995-1996 to 2007-2008, the number of office visits at which an ADHD diagnosis was made increased from 3.1 to 14.5 per 1,000 U.S. adults (aged 20 years or older.
- *Greater rates of increase in ADHD diagnosis and treatment among female than male children and teens (aged 5 to 18 years).*
- *Lower rates of diagnosis and treatment for non-White than White populations.*

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Conclusion: Upward trends in ADHD diagnosis and treatment have continued but vary markedly by group. Studies of undertreatment/overtreatment are needed. (J. of Att. Dis. 2020; 24(1) 10-19)

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Update the Multimodal Treatment of ADHD (MTA): Twenty Years of Lessons

The MTA study has taught us to think long-term about ADHD, in that a treatment that may be effective now will not necessarily be effective in future years into adulthood. Hence the importance of long-term follow-up of people with ADHD and, although the multimodal approach is still the ideal strategy, medication and objectives must be personalized according to each patient's needs at important points in their development. This also highlights the importance of making an early diagnosis and prescribing an effective, personalized treatment plan based on each person's needs and circumstances in order to avoid greater risks in adulthood.

Actas Esp Psiquiatr 2019;47(1):16-22

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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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Individuals 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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Most Endorsed Symptoms of Adults With ADHD in a Number of Studies

- Difficulty with directions (98%)
- Poor sustained attention (92%)
- Shifting activities (92%)
- Easily distracted (88%)
- Losing things (80%)
- Fidgeting (70%)
- Interrupting (70%)

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Historically the Prototypical Adult With ADHD

- Male
- Dysthymic
- More geographic moves
- Employed (90%)
- Less schooling
- Lower Socio-economic status
- More driving problems
- Substance problems
- General neuropsychological weaknesses related to self-regulation and inhibition

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What is the Mindset of Adults With ADHD?

- Pessimistic
- Negative world view
- External locus of control
- Helpless
- Negotiate daily life through a negative reinforcement model
- Frustrated

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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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DSM 5 Diagnostic Categories For ADHD

- ADHD Predominantly Inattentive Type
- ADHD Predominantly Hyperactive-Impulsive Type
- ADHD Combined Type
- ADHD Not Otherwise Specified

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Is the Inattentive Type of ADHD a Distinct Disorder?

- Better prognosis
- Fewer adverse family variables
- Fewer problems with disruptive behavior
- Greater risk of learning disability
- Greater risk of internalizing problems
- Socially neglected
- Higher incidence in females vs. males

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Females With ADHD

- Similar to clinic referred males for incidence of emotional and learning problems in childhood.
- Fewer disruptive behavioral problems than clinic referred males in childhood.
- Adult studies suggesting fewer anti-social personality problems than males with ADHD but likely similar emotional problems.
- Higher ratio of Inattentive to Combined Type in childhood and likely adulthood vs. males.

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Problems With the DSM 5 ADHD Diagnosis

- Categorical models don't predict as well as dimensional models
- Too few impulsive symptoms (3)
- Polythetic system
- Symptom threshold issues
- Age of onset
- Impairment issue

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Why is Diagnosis Complex?

- Symptoms represent excess of normal behavior
- Criteria have changed, particularly impairment requirements
- Symptoms are common to many diagnoses
- Continuum – clinical judgment critical

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Childhood and Adult Symptom Self-Report

Table 1. Number of people endorsing each possible number of items at the "at least sometimes" level on a DSM-IV scale of ADHD symptoms recalled from childhood (n = 719)

# Items endorsed	Count	%	Cumulative %
0	19	2.64	2.64
1	16	2.23	4.87
2	20	2.78	7.65
3	18	2.50	10.15
4	23	3.20	13.35
5	24	3.34	16.69
6	34	4.73	21.42
7	34	4.73	26.15
8	31	4.31	30.46
9	46	6.40	36.86
10	40	5.56	42.42
11	48	6.68	49.10
12	56	7.79	56.88
13	54	7.51	64.40
14	42	5.84	70.24
15	45	6.26	76.50
16	45	6.26	82.75
17	54	7.51	90.26
18	70	9.74	100.00

Table 2. Number of people endorsing each possible number of items at the "at least sometimes" level on a DSM-IV scale of ADHD symptoms for current functioning (n = 719)

# Items endorsed	Count	%	Cumulative %
0	7	0.97	0.97
1	11	1.53	2.50
2	21	2.92	5.42
3	35	4.86	10.28
4	36	5.00	15.28
5	42	5.83	21.11
6	38	5.28	26.39
7	59	8.19	34.58
8	52	7.22	41.81
9	55	7.64	49.44
10	59	8.19	57.64
11	56	7.78	65.42
12	57	7.92	73.33
13	57	7.92	81.25
14	34	4.72	85.97
15	30	4.17	90.14
16	28	3.89	94.03
17	25	3.47	97.50
18	18	2.50	100.00

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Number of People Endorsing Symptoms

Table 3. Number of people endorsing each possible number of items at the "at least often" level on a DSM-IV scale of ADHD symptoms recalled from childhood (n = 719)

# Items endorsed	Count	%	Cumulative %
0	199	27.68	27.68
1	95	13.21	40.89
2	68	9.46	50.35
3	53	7.37	57.72
4	51	7.09	64.81
5	37	5.15	69.96
6	37	5.15	75.10
7	20	2.78	77.89
8	21	2.92	80.81
9	33	4.59	85.40
10	18	2.50	87.90
11	10	1.39	89.29
12	13	1.81	91.10
13	18	2.50	93.60
14	11	1.53	95.13
15	10	1.39	96.52
16	7	0.97	97.50
17	12	1.67	99.17
18	6	0.83	100.00

Table 4. Number of people endorsing each possible number of items at the "at least often" level on a DSM-IV scale of ADHD symptoms for current functioning (n = 719)

# Items endorsed	Count	%	Cumulative %
0	220	30.56	30.56
1	150	20.83	51.39
2	87	12.08	63.47
3	66	9.17	72.64
4	49	6.81	79.44
5	35	4.86	84.31
6	28	3.89	88.19
7	15	2.08	90.28
8	19	2.64	92.92
9	16	2.22	95.14
10	6	0.83	95.97
11	12	1.67	97.64
12	6	0.83	98.47
13	4	0.56	99.03
14	5	0.69	99.72
15	1	0.14	99.86
16	1	0.14	100.00
17			
18			

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Table 5. Percentage of sample endorsing each item at each level for childhood recalled ADHD symptoms

Items	Never or rarely	Sometimes	Often	Very Often
1. Fail to give close attention to details or make careless mistakes in my work	26.8	8.5	19.7	5.0
2. Fidget with hands or feet or squirm in seat	26.6	40.3	22.4	10.8
3. Difficulty sustaining my attention in tasks or fun activities	39.9	39.8	15.5	4.8
4. Leave my seat in classroom or in other situations in which seating is expected	56.8	25.6	12.0	5.6
5. Don't listen when spoken to directly	43.5	36.7	14.5	5.3
6. Feel restless	52.2	34.0	9.1	4.7
7. Don't follow through on instructions and fail to finish work	37.3	42.5	14.7	5.5
8. Have difficulty engaging in leisure activities or doing fun things quietly	58.0	27.9	10.6	3.5
9. Having difficulty organizing tasks and activities	29.1	36.1	19.9	14.8
10. Feel "on the go" or "driven by a motor"	36.0	33.9	19.2	10.8
11. Avoid, dislike, or am reluctant to engage in work that requires sustained mental effort	37.9	43.3	13.7	5.1
12. Talk excessively	37.3	40.4	15.5	6.8
13. Lose things necessary for tasks or activities	25.6	39.1	22.6	12.7
14. Blurt out answers before questions have been completed	34.3	38.9	17.4	9.4
15. Easily distracted	42.6	40.8	12.3	4.3
16. Have difficulty awaiting turn	45.6	35.3	13.3	5.9
17. Forgetful in daily activities	42.6	40.8	12.3	4.3
18. Interrupt or intrude on others	45.6	35.3	13.3	5.9

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Table 6. Percentage of sample endorsing each item at each level for current ADHD symptoms

Items	Never or rarely	Sometimes	Often	Very Often
1. Fail to give close attention to details or make careless mistakes in my work	45.90	48.96	3.76	1.39
2. Fidget with hands or feet or squirm in seat	42.06	37.05	13.23	7.66
3. Difficulty sustaining my attention in tasks or fun activities	55.87	33.52	7.12	3.49
4. Leave my seat in classroom or in other situations in which seating is expected	74.30	19.24	4.78	1.69
5. Don't listen when spoken to directly	60.45	32.73	4.32	2.51
6. Feel restless	24.65	52.69	15.01	7.65
7. Don't follow through on instructions and fail to finish work	66.57	26.97	5.06	1.40
8. Have difficulty engaging in leisure activities or doing fun things quietly	2.59	27.68	6.68	3.06
9. Having difficulty organizing tasks and activities	54.44	33.47	10.14	1.94
10. Feel "on the go" or "driven by a motor"	20.50	39.33	23.57	16.60
11. Avoid, dislike, or am reluctant to engage in work that requires sustained mental effort	54.31	34.86	8.19	2.64
12. Talk excessively	37.29	41.20	14.25	7.26
13. Lose things necessary for tasks or activities	45.96	41.70	8.79	3.55
14. Blurt out answers before questions have been completed	37.13	46.45	11.40	5.01
15. Easily distracted	31.80	48.95	12.41	6.83
16. Have difficulty awaiting turn	43.72	38.41	11.31	6.56
17. Forgetful in daily activities	40.64	45.39	9.22	4.75
18. Interrupt or intrude on others	49.31	41.25	7.22	2.22

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ADHD is NOT:

- A simple matter of symptom endorsement
- Simply the identification of certain personality traits
- Advantageous to have

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Key Questions to Consider in the Diagnostic Process

- Are key symptoms clearly present?
- Is there objective evidence that these symptoms cause significant impairment in multiple domains of daily adaptive functioning?
- Have these symptoms been unremitting since childhood? If not, why?
- Have these symptoms been chronic and pervasive? If not, why?

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Key Questions to Consider in the Diagnostic Process

- What evidence exists that these symptoms are not primarily or exclusively due to other factors such as lack of effort, secondary gain, etc.
- Is the individual putting forth best effort?
- Are the person's symptoms better explained by another psychiatric or medical condition?
- Is there evidence of comorbidity?

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Diagnostic Guidelines

- Use self-report of ADHD symptoms:
- For current symptoms remember that only 5 are needed for older teens and adults
- For childhood recall of symptoms use DSM
- Mandatory corroboration
- Paper trail of impairment
- Onset of symptoms before age 13

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Diagnostic Guidelines

- Chronic course, no remission
- Impairment in major life activities using average person standard
- If impairment arose late must be explained
- Rule out: low IQ, LD, anxiety, depression as primary cause of symptoms

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Diagnostic Issues

- Under/over report of symptoms
- Poor retrospective recall of childhood
- Under reporting of symptoms by others
- Lack of corroboration
- Limited records
- Viewing all inattention as symptomatic of ADHD
- Legal advantages

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Aids in Formulating Diagnosis

- Use of records to establish onset and chronicity
- Multiple informants
- Discrepancy between IQ, achievement and grades
- Clinical presentation

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Assessment Dilemmas

- Questionable childhood onset
- Discrepant data
- Self-report only
- Lack of past documentation
- Differences between reporter

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Assessment Dilemmas

- Substance abuse/dependence issues
- Questionable level of impairment
- Co-morbidity
- Interpreting test scores

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Assessment Tools

- History
- Self-report measures
- Other report measures
- Tests of attention and inhibition
- Cognitive (memory, processing, etc.) measures
- Intellectual measures
- Neuropsychological measures
- Personality measures

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Self-report and Observer Questionnaires

- Conners Adult Scales
- BAARS
- Wender Scale
- Brown Scales
- BRIEF
- Spousal and Parent Forms
- CEFI-A
- BRIEF 2

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Attention is a Complex Process

- Psychological disturbances and neurological conditions predict attention
- Attention predicts general memory
- General memory predicts verbal and spatial memory

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Tasks Sensitive and Specific to ADHD

- Simple sequential memory tasks
- Learning tasks
- Story memory tasks
- Perceptual search tasks
- Distraction tasks
- Executive function tasks
- Inhibition & attention tasks

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Neuropsychological Performance Deficits in Adults With ADHD

- Memory deficits (poor encoding)
- Poor visual-motor integration and tracking
- Slow psychomotor speed
- Poor cognitive flexibility
- Poor planning
- Problems increase as task complexity increases
- Conflicting findings based on limited studies

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Tests of Attention and Inhibition

- Conners Continuous Performance Test
- AULA
- MOXO
- Gordon Diagnostic System
- Tests of Variables of Attention
- Intermediate Visual and Auditory Test

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Meta-analysis of neuropsychological performance of adults with ADHD.

1675 subjects, 24 studies, 10 neuropsychological functions

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In 8 of 10 neuropsychological functions subjects with ADHD demonstrated significant performance deficits.

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Small effect size was found for:

- Visual memory
- Visual problem solving
- Executive functions defined as planning and control of actions

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Large effect size was found for:

- Verbal memory
- Focused attention
- Sustained attention
- Working memory
- Abstract verbal problem solving

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Simple alertness tasks dependent upon psychomotor reaction time were less impaired than more complex attention tasks.

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Based upon these data executive and inhibitory tasks may not be the best way of distinguishing ADHD in adults.

74

These data speak strongly to a significant deficit in neuro-cognitive functions in adults with ADHD.

75

This deficit may be best characterized by impaired verbal memory and low achievement for tasks requiring focused and/or sustained attention.

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Will a battery of tasks reliably facilitate the clinical diagnosis of ADHD?

NOT AT THIS TIME. THESE INSTRUMENTS ARE DESCRIPTIVE RATHER THAN DIAGNOSTIC!

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These measures may be sensitive and specific. Some may even possess positive predictive power. None possess clinically significant negative predictive power.

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Differential Diagnosis

- Schizophrenia
- Personality disorders
- Substances
- Brain injury
- Mood disorders
- Anxiety disorders
- Bipolar disorder
- ASD

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Differential Diagnosis: Many of these conditions usually have:

- Later onset
- Inconsistent childhood history
- Different course and symptom constellation
- In bipolar disorder: bursts of productivity, cyclical mood swings, family history, differing symptom profile, and atypical medication response

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Assignment of a diagnostic label does not mean the person is automatically entitled to accommodations.

81

Documentation standards are more stringent than clinical practice.

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A disability is a physical or mental impairment that substantially limits one or more major life activities.

83

An individual is not substantially limited if the impairment does not amount to a significant restriction when compared with the abilities of the average person.

84

To be protected by the ADA, an individual must be truly disabled relative to the general population.

85

Successful compensation belies substantial impairment.

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Documentation For ADA

- Impairment before age 18
- Impairments in major life activities relative to average person
- Rule out or explain other conditions
- Explain prior treatments and accommodations
- Explain why more are needed
- Justify desired accommodations

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Documentation For ADA

- Possess proper clinical credentials
- Use DSM for current and retrospective symptoms
- Obtain corroboration
- History of childhood onset
- History of chronic, unremitting course

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Accommodations should only address the interactions between functional impairments and task demands.

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Treatment Model For Adult ADHD

- Education about living with the condition
- A systems mindset
- Medication
- Cognitive behavioral counseling
- Coaching?
- Vocational support
- Balance process vs. product activities
- Family and parenting support

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Symptom relief is not synonymous with changing long term outcome

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Managing the Symptoms of ADHD With Medications

Reducing Symptoms to Improve Consequences

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Pills Will Not Substitute for Skills

But They Will Relieve Symptoms

93

Do stimulants and other classes of drugs beneficial for ADHD act as selective dopamine reuptake inhibitors?

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Preparations Used to Treat ADHD

- Methylphenidate (Ritalin, Concerta, Metadate, Methalyn)
- Dexedrine
- Mixed Salts of Amphetamine (Adderall)
- Buproprion (Buspar)
- Tricyclics (imipramine, desipramine, nortriptyline)
- Atomoxetine (Straterra)

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Demonstrated Side Effects of Stimulants

- Anorexia
- Insomnia
- Irritability
- Headache
- Stomachache
- Rebound irritability
- Tics?

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Other Classes of Drugs Tried For ADHD

- Selective serotonin reuptake inhibitors
- Venlafaxine
- Anti-convulsants
- Anti-psychotics
- Anti-hypertensives
- Propanolol
- Levodopa

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Psychosocial Interventions For Adult ADHD

- Education
- Vocational guidance
- Academic accommodations
- Cognitive counseling
- Coaching?
- Marital counseling

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Key Goals of Intervention

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

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Key Goals of Intervention

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

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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.

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We must possess the courage, integrity, patience and knowledge to help those in need regardless of the current state of scientific and political affairs.

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My View of the Future of the ADHD Diagnosis

- 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.
- ADHD will continue in the USA as an ADA qualifying condition.

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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.

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In Their Own Words

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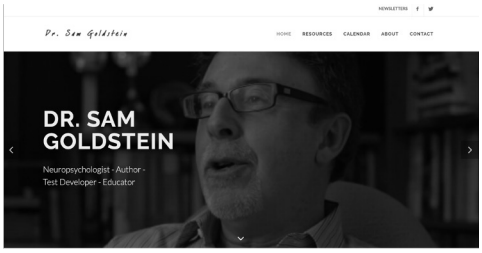

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Questions?

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TEDx: https://www.youtube.com/watch?v=isfw8JJ-eWM

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