

DIR/Floortime

(WEBSITE: 153 -155)



- **DIR: Developmental Individual Difference**
- **“...is a framework that helps clinicians, parents and educators conduct a comprehensive program tailored to the unique challenges and strengths of children with Autism Spectrum Disorders (ASD) and other developmental challenges.”**

Interdisciplinary Counsel on Developmental and Learning Disorders (ICDL) (8/11/2010). [What is dir/floortime?](http://www.icdl.com/dirFloortime/overview/index.shtml/)

Applied Behavior Analysis

(WEBSITE: 156)



“Applied behavior analysis (ABA) is a discipline concerned with the application of behavioral science in real-world settings such as clinics or schools with the aim of addressing socially important issues such as behavior problems and learning...Features common to all ABA-based approaches are objective measurement of behavior, precise control of the environment and use of procedures based on scientifically established principals of behavior...”



Applied Behavior Analysis

“...Any clinical procedure or research investigation adhering to these basic criteria can be considered to be an ABA-based procedure. This includes ‘functional behavioral assessment’ and approaches such as ‘Positive Behavioral Support’ and forms of ‘Behavior Therapy’ that rely on direct observation of behavior and analysis of behavior environment relations.”

Hagopian, L.P., and Boelter, E.W. (8/27/2010). Applied Behavior Analysis and Neurodevelopmental Disorders: Overview and Summary of Scientific Support. Kennedy Krieger Institute: www.kennedykrieger.org/kki_misc.jsp?pid=4761.

People Who Can Help with SCD/ASD

- **American Speech-Language Hearing Association:**
www.professional.asha.org
- **Behavioral Neurologist/Neuro-Psychiatrists and/or Neuro-Ophthalmologist:** www.anpaonline.org and www.ama-assn.org
- **Mental Health Professionals**
- **American Occupational Therapy Association:**
www.atoa.org



*AD/HD,
Inattentive
Presentation,
(Restrictive),
DSM-5,
“Crichton
Syndrome”,
“Concentration
Deficit
Disorder”*



DSM-5 AD/HD as of May 1, 2012

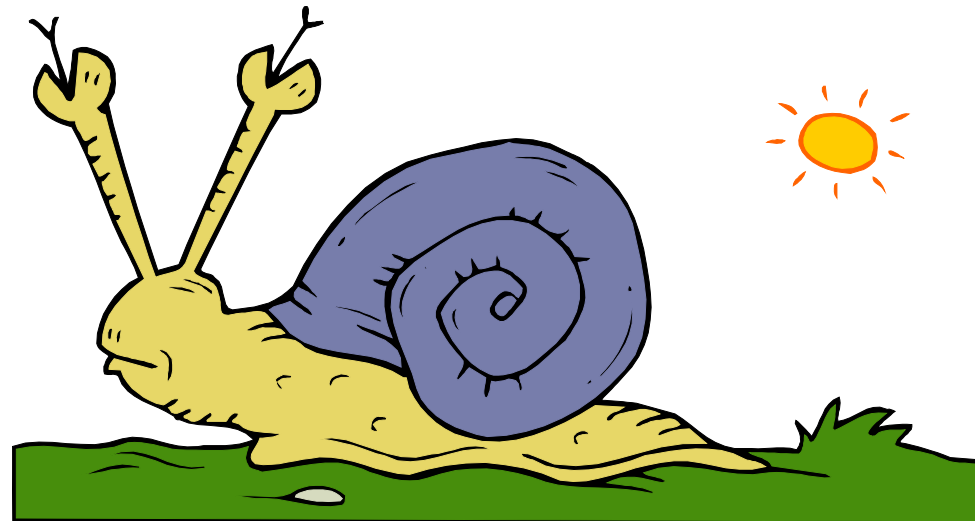
- **Attention-Deficit/Hyperactivity Disorder:**
- **Specify based on current presentation-**
 - **Combined Presentation**
 - **Predominately Inattentive Presentation**
 - **Predominately Hyperactive/Impulsive Presentation**
 - **Inattentive Presentation (Restrictive)**
 - **Other Specified Attention-Deficit Hyperactivity Disorder**

DSM-5 AD/HD as of May 1, 2012

- **Need to have symptoms prior to age 12**
- **22 symptoms; Up from 18**
- **9 symptoms Inattention: Need 6; May need only 4 over age 17**
- **13 symptoms of Hyperactivity/Impulsivity: Need 6; May need only 4 over age 17**
- **Inattentive Presentation (Restrictive): Must meet Inattentive criteria and have no more than 2 Hyperactive/Impulsive Symptoms**

Attention-Deficit/Hyperactivity Disorder, Predominately Inattentive Type

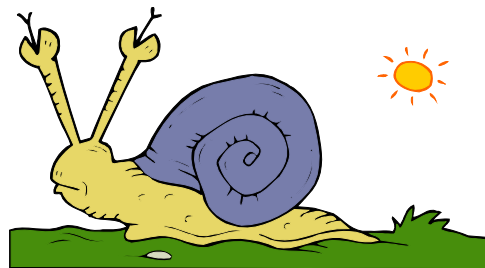
- **Brown believes the Inattentive Type has all the symptoms of the Combined Type except Hyperactivity-Impulsivity**



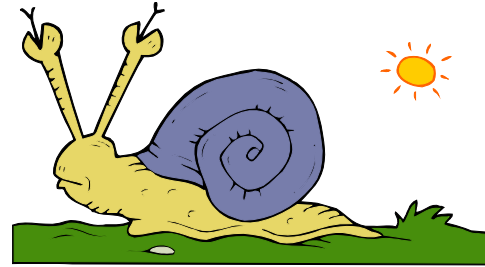
Inattentive AD/HD (Continued)

Brown believes the following are the areas of difficulty in the Inattentive Type:

- 1. Difficulty organizing and activating for work**
- 2. Problems sustaining attention and concentration**
- 3. Problems sustaining energy and effort**



Brown and Inattentive AD/HD (Continued)



4. Problems managing affective interference
5. Problems utilizing working memory and accessing recall

Brown, T.E. (1995). Differential Diagnosis of ADD Versus ADHD in adults. In K.G. Nadeau (Ed.), Attention-Deficit Disorder in Adults. New York, NY: Bruner/Mazel, 93-108.

Inattentive AD/HD (Continued)

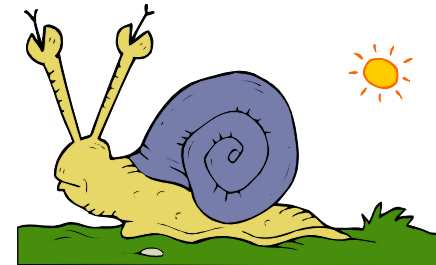
Brown (1995) continued the only difference between Inattentive AD/HD and Combined Type AD/HD was “ACTION”. Those with Combined Type AD/HD have significant impairment with ACTION, which is being able to predict with reasonable accuracy how their personal actions could negatively effect others and how that could come back to haunt them in the future. They have time blindness. Those with Inattentive AD/HD do not have time blindness.

Brown, T.E. (1995). Differential Diagnosis of ADD Versus ADHD in Adults. In K.G. Nadeau (Ed.), Attention-Deficit Disorder in Adults. New York, NY: Bruner/Mazel, 93-108.

Willcutt, Chhabildas and Pennington's Sluggish Cognitive Tempo Symptoms

- **More problems with math achievement than Combined Type and 'Normals'.**
- **More Internalizing Problems than Combined Type/Few, if any Externalizing Problems**
- **Significant Processing Speed Problems**

Willcutt, E.G., Chhabildas, N. and Pennington, B.F. (2001). Validity of the DSM-IV Subtypes of ADHD. ADHD Report, 9 (1), pp. 2-5.



Barkley's 2013 SCT Symptoms

- **Daydreaming excessively**
- **Trouble staying alert or awake in boring situations**
- **Easily confused**
- **Spacey or “in a fog”; Mind seems to be elsewhere**
- **Stares a lot**
- **Lethargic, more tired than others**
- **Underactive or have less energy than others**
- **Slow moving or sluggish**
- **Doesn't seem to understand or process information as quickly or accurately as others**

Barkley's 2013 SCT Symptoms Continued

- **Apathetic or withdrawn; less engaged in activities**
- **Gets lost in thought**
- **Slow to complete tasks; needs more time than others**
- **Lacks initiative to complete work or effort fades quickly**

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD—Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

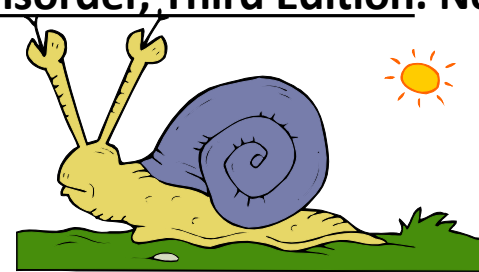


Mild Combined Type vs. Inattentive Type/SCT

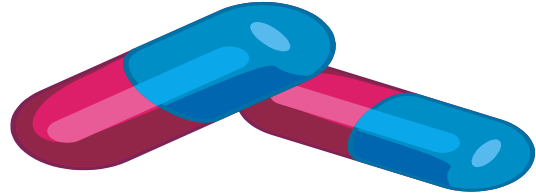
30% to 50% of those with Inattentive AD/HD have the Sluggish Cognitive Tempo (SCT) subtype. The remainder are Shadow Syndrome (Mild) Combined Type.

Barkley, R.A. (2002) Mental and Medical Outcomes of AD/HD. Pre-Conference Institute, # TPA1, Thursday October 17, 2002, 14th Annual CHADD International Conference, Miami Beach, FL.

Barkley, R.A. (2006). Attention-Deficit Hyperactivity Disorder, Third Edition. New York, NY: Guilford, p. 37.



Medication and Inattentive AD/HD



- **Only about 20% of those with Inattentive AD/HD respond to Stimulant Medication.**
- **Those with Sluggish Cognitive Tempo probably do not respond.**

Barkley, R.A. (2002) Mental and Medical Outcomes of AD/HD. Pre-Conference Institute, # TPA1, Thursday October 17, 2002, 14th Annual CHADD International Conference, Miami Beach, FL.

Barkley, R.A. (2006). Attention-Deficit Hyperactivity Disorder, Third Edition. New York, NY: Guilford, p. 202.

Ramsay, R. (2010). Nonmedication Treatments for Adult ADHD. Washington, DC: American Psychological Association Press, p. 15.

CHADD Conference November, 2012

Barkley (November 9, 2012) stated the ADHD and Disruptive Behavior Disorders Workgroup of the DSM-5 had decided in October not to include Attention-Deficit/Hyperactivity Disorder, Inattentive Presentation (Restrictive) in the manual's revision. He also mentioned the committee will probably not have adult norms and cutoffs for AD/HD...

CHADD Conference 2012

Barkley (November 9, 2012) continued that the DSM-5 committees had been told by a large group of health insurance companies, the Administration, the Department of Health and Human Services as well as the Social Security Administration not to add new disorders or do anything that would increase the prevalence of disorders. Hence, the decisions of the previous slide.

CHADD Conference, 2012

At the end of Barkley's SCT seminar there was a lively discussion about what to call SCT. Focused Attention Disorder (FAD) was suggested. But people did not like the acronym FAD, implying the disorder is a passing fad. Sluggish Cognitive Tempo, Developmental Concentration Disorder, Atypical AD/HD, Pathological Mind Wandering among others were considered, but none of these were thought to convey the true nature of the disorder and/or to be pejorative. Hence, they did not arrive at a name.

CHADD Conference, 2012

Barkley, R. A. (November 9, 2012) The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD– Impairment, and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

Author (May 1, 2012) Attention Deficit/Hyperactivity Disorder- Rationale: Rationale for Changes in ADHD in DSM-5 From the ADHD and Disruptive Behavior Disorders Workgroup. From website: <http://www.dsm5.org/ProposedRevision/Pages/proposedrevision.aspx?rid=383#>.

CHADD Conference, Martha Denckla, and Sluggish Cognitive Tempo

- **During the question and answers portion of her keynote address I asked Dr. Denckla for her insights into SCT.**
- **She said she believes SCT exists and it is a form of extremely slow processing that is often found to be associated with AD/HD. These people have extremely slow response times. They are starting to perform electrophysiology studies of SCT because fMRI is too slow.**

Denckla, M.B. (November 10, 2012). Closing Keynote: Understanding the Neurobiological Basis of ADHD: 25 Years of Innovation in Research. Paper presented at the 24th Annual CHADD international Conference, Burlingame, CA; November 8-10, 2012.

The Two Dimensions of SCT

- **Sluggishness/Lethargy**
- **Daydreaming**
 - These are correlated to each other .40 to .50
- **SCT is as common in males as in females**
- **Symptoms and severity are stable throughout life. Prevalence in children 4.7%; in adults 5.1%**

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD— Impairment, and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

SCT Age of Onset

The average age of onset for SCT is 8 to 10 years old. Two to 3 years older than those with AD/HD.

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD– Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

Processing Speed: SCT Vs ADHD

- **The processing speed difficulties for those with SCT is related to slow response time and processing. They are prone to error on speeded tasks.**
- **The processing speed difficulties for those with AD/HD is related to variability in reaction time which is 3 times more than those without AD/HD.**

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD— Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

Executive Function and SCT

- **Barkley (2012) found those with SCT have no problems with Executive Functions whereas those with AD/HD have it in all areas.**
- **The only area of impairment SCT children have that is more severe than those with AD/HD is in sports. AD/HD children are more impaired in all other areas.**
- **Those with ADHD and comorbid SCT are the most impaired overall.**
- **About 50% with AD/HD have comorbid SCT**

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD— Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

Adults with SCT & Impairment

- **Adults with SCT are more significantly impaired in the following areas than are those with AD/HD and the non-disabled:**
 - **Work**
 - **Education**
 - **Sexual behavior**

Barkley, R. A. (2011, May 23). Distinguishing Sluggish Cognitive Tempo From Attention-Deficit/Hyperactivity Disorder in Adults. Journal of Abnormal Psychology. Advance. online publication. doi: 10.1037/a0023961.

Causes of SCT (Continued) (Website: 157)



SCT appears to be highly heritable.

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD– Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

Causes of SCT(Continued)

- **SCT may be a form of hypoarousal almost like narcolepsy.**
- **It may be a dysfunction of the orientation-action attention network at the back of the brain.**
- **It may be related to an anxiety disorder. Anxiety Disorders are highly comorbid with SCT.**

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD– Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

Causes of SCT(Continued)

- **SCT may be related to Pathological Mind Wandering. The following may be the cause of the mind wandering:**
 - They cannot inhibit their mind from wandering.
 - They are trying to avoid boredom.
 - They are trying to avoid anxiety.
 - They have some obsessive component of Obsessive Compulsive Disorder.

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD– Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

New Treatments for SCT

“Behavioral psychosocial treatment, when specifically adapted for ADHD-I and coordinated among parents, teachers and children, appears efficacious in reducing symptoms and impairment associated with ADHD-I.” (p. 1041)

Pfiffner, L.J., Mikami, A.Y., Huang-Pollock, C., Easterlin, B., Zalecki, C. and MCBurnett, K. (August, 2007). A Randomized Controlled Trial of Integrated Home-School Behavioral Treatment for ADHD, Predominately Inattentive Type. Journal of the American Academy of Child and Adolescent Psychiatry, 46(8), 1041-1050. From website: [http://www.jaacap.com/article/S0890-8567\(09\)61554-9/abstract](http://www.jaacap.com/article/S0890-8567(09)61554-9/abstract).

Accommodating SCT in School

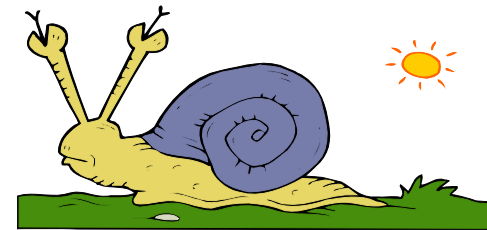
- Behavioral interventions that focus on noncompetitive external rewards for meeting specific goals.
- Extended time to address slow processing speed.
- Social skills training in groups without conduct disordered kids. SCT kids benefit from social training.
- About 60 % have comorbid LD. Treat comorbidities.

Barkley, R.A. (2006). Attention-Deficit Hyperactivity Disorder. New York, NY: Guilford, p. 552.

Barkley, R.A. (2008). Advances in ADHD: Theory, Diagnosis and Management. J & K Seminars, L.L.C., 1861 Wichersham Lane, Lancaster, PA 17603; 800-801-5415; www.jkseminars.com.

Hynd, G. (2002). ADHD and Its Association with Dyslexia: Diagnostic and Treatment Challenges. Paper presented at the 53rd Annual International Dyslexia Association

Conference, Atlanta, GA, November 16.



Accommodating SCT in School

SCT children experience significantly more anxiety than children with other types of AD/HD. They may respond better to behavioral treatments that focus on reducing their anxiety.

Ramsay, R. (2010). Nonmedication Treatments for Adult ADHD. Washington, DC: American Psychological Association Press, p. 15.

SCT is NOT new!

**Alexander
Crichton may have
written about
what we call SCT
in 1798!**



Crichton, A. (2008). An inquiry into the nature and origin of mental derangement: On attention and its diseases. Journal of Attention Disorders, 12, 200-204 (Original work published 1798).

Barkley, R. A. (November 9, 2012). The Other Attention Disorder: Sluggish Cognitive Tempo (ADD/SCT) Vs. ADHD— Impairment and Management. Paper presented at the 24th Annual CHADD International Conference on ADHD, Burlingame, CA, November 8 – 10, 2012.

Crichton Syndrome

I wrote Barkley on Monday (November 12, 2012) and suggested the name, “Crichton Syndrome” for SCT. The name does not suggest the cause, because we currently do not know it, it gives Andrew Crichton credit for first observing it and it demonstrates how long we have known about it. In addition it is not pejorative and by using the word syndrome it indicates we don’t know much about it, but it merits more study.

~~Crichton Syndrome~~ Now Is Concentration Deficit Disorder (CDD)

- **Barkley (November 13, 2012) responded he liked the name and would re-examine Crichton's work to make absolutely sure he merits credit for the "discovery."**
- **Barkley (November 2013) wrote an article to rename SCT Concentration Deficit Disorder (CDD)**

Barkley, R.A. (November, 2013). A plea to Rename Sluggish Cognitive Tempo (SCT) as Concentration Deficit Disorder. The ADHD Report, 21(7), 1-4.

New Articles on “CDD”

Bauermeister, J.J., Barkley, R.A., Bauermeister, J.A., Martinez, J.V. and McBurnett (December 17, 2011-Published online). Validity of the Sluggish Cognitive Tempo, Inattention, and Hyperactivity Symptom Dimensions: Neuropsychological and Psychosocial Correlates. Journal of Abnormal Child Psychology, DOI 10.1007/s10802-011-9602-7.

Barkley, R. A. (2011, May 23). Distinguishing Sluggish Cognitive Tempo From Attention-Deficit/Hyperactivity Disorder in Adults. Journal of Abnormal Psychology. Advance online publication. DOI: 10.1037/a0023961.

Russell A. Barkley (October 24, 2012): Distinguishing Sluggish Cognitive Tempo From ADHD in Children and Adolescents: Executive Functioning, Impairment and Comorbidity, Journal of Clinical Child & Adolescent Psychology, DOI:10.1080/15374416.2012.734259.

Barkley, R.A. (November, 2013). A Plea to Rename Sluggish Cognitive Tempo (SCT) as Concentration Deficit Disorder. The ADHD Report, 21(7), 1-4.

Dr. Blake & Cross Country Education

www.crosscountryeducation.com

❖ **Other Seminars Dr. Blake does for Cross Country Education (6 CEUS, **CDs available***, **Video DVDs available**):**

- **Social Difficulties of Learning, Attentional and Autism Spectrum Disorders: Screening and Treatment-2013 Edition***
- **Neurosocial Disorders: Creating a Comprehensive Treatment Plan***
- **Assessment and Treatment of Dyslexia in Adolescents and Adults: No Adult Left Behind***
- **Building a Life Skills Tool Kit: Helping Prepare the Adolescent with Autism Spectrum Disorder for Adult Life**
- **Life-changing Interventions for the New AD/HD: Beyond the DSM-5@**

Dr. Blake & Cross Country Education

www.crosscountryeducation.com

❖ Webinars Dr. Blake does for Cross Country Education (1 CEU available):

- **Understanding Inattentive ADHD: Evidence-Based Screening and Treatment Strategies (Recently Updated!)**
- **Everyone is a Stranger: Face Blindness in Children with Autism Spectrum Disorders**
- **“No! I Don’t Want to Give My Child a Drug to Treat Their ADHD”:
Complementary and Alternative Treatments for ADHD**

Kevin T. Blake, Ph.D., P.L.C.

- ***Dr. Blake's personal story seminar:***
 - **I Pulled an All-Nighter for My High School Graduation and Other Adventures of a Dyslexic, Hearing Impaired Psychologist**
- ***Secondary & Post Secondary Education and Employer Consultation***
- ***Program Development***
- ***Staff Training & Conference Presentations-Learning Disorders, Dyslexia, AD/HD, Autism Spectrum Disorders; Children, Adolescents & Adults***
 - **520-327-7002**
 - **www.drkevintblake.com**

