

Evidence Based Practices in School Mental Health: Attention Deficit Hyperactivity Disorder (ADHD)

Background Information

Attention problems during classroom instruction and schoolwork are among the most common difficulties exhibited by students, with ADHD being one of the most frequent reasons for a referral to a school psychologist (Barkley, 2006). Students identified with ADHD often exhibit behaviors that interfere with school success, such as struggling with maintaining attention, impulsive behaviors, and difficulties with organization and transitions.

Symptoms

Although the specific combination and severity of ADHD symptoms differs in each child, the DSM-IV describes a child with ADHD as one who:

Inattention

- often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
- often has difficulty sustaining attention in tasks or play activities
- often does not seem to listen when spoken to directly
- often does not follow through on instructions and fails to finish schoolwork (not due to oppositional behavior or failure to understand instructions)
- often has difficulty organizing tasks and activities
- often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort
- often loses things necessary for tasks or activities
- is often easily distracted by extraneous stimuli
- is often forgetful in daily activities

Hyperactivity

- often fidgets with hands or feet or squirms in seat
- often leaves seat in classroom or in other situations in which remaining seated is expected
- often runs about or climbs excessively in situations in which it is inappropriate (in adolescents, feelings of restlessness)
- often has difficulty playing or engaging in leisure activities quietly
- is often “on the go” or acts as if “driven by a motor”
- often talks excessively

Impulsivity

- often blurts out answers before questions have been completed
- often has difficulty awaiting turn
- often interrupts or intrudes on others (e.g., butts into conversations or games)

Assessment

Key features in the assessment of a child with suspected ADHD include (National Association of School Psychologists [NASP], 2011):

- A multisetting, multimethod, and multi-informant evaluation (DuPaul & Stoner, 2010)
- Direct input from both home and school settings (Power, Karustis, & Habboushe, 2001)
- A functional analysis of behavior
- An understanding that normal development, instructional match, medical conditions, and home/school factors can affect attention (Wolraich & DuPaul, 2010).

Treatment and Intervention

The behaviors associated with ADHD exist along a continuum from mild to severe and appropriate supports and interventions will vary depending on the nature, chronicity, and severity of the behaviors of concern (NASP 2011).

While doctor-prescribed stimulant medication is a highly effective treatment for ADHD, psychosocial interventions such as those implemented in a classroom setting are a very important part of treatment and have been shown to result in improved outcomes over medication therapy alone (Wolraich & DuPaul, 2010). The decision for medication treatment is one to be made between the child’s family and medical professionals, and any services in a school setting should not be made contingent upon this choice (American Academy of Pediatrics, 2001).

If a child’s family has chosen not to place their child on medication, psychosocial interventions remain a particularly important avenue to increase a student’s success in the classroom in the face of difficulties with inattention, hyperactivity, and impulsivity (Brock, Jimerson, & Hansen, 2009).

Below are lists of general intervention components, classroom environment changes, individual student accommodations, and psychosocial interventions that can improve outcomes for students with attention difficulties.

General Intervention Components (adapted from NASP, 2011)

1. Collaboration and consultation with families to facilitate parental behavior support at home, and to promote the use of consistent approaches across home and school settings
2. Monitoring by a school-based intervention team to ensure effective implementation of interventions, to provide adequate support for those interventions, and to evaluate the effectiveness of programs in meeting behavioral and academic goals
3. Collaboration with community agencies and professionals providing medical and related services to students/families
4. Appropriate supports and intervention to help students with ADHD to appreciate their unique abilities and develop feelings of self-worth and confidence

Changes to the Classroom Environment (adapted from Brock et al., 2009)

1. Traditional classroom set-ups, with desks facing forward, work more effectively for students with attention difficulties.
2. Children may benefit from seating towards the front of the classroom, in order to provide increased opportunity for positive reinforcement and reduced time to intervene with off-task or disruptive behaviors.
3. Establish predictable routines, clear rules, and limits with immediate and appropriate enforcement
4. Post and review daily classroom rules

Student-Level Classroom Accommodations (adapted from Brock et al., 2009)

1. Limit task duration, introduce breaks and break longer tasks up into smaller parts
2. Increase the amount of direct instruction time the student receives (versus independent seat-work).
3. Ensure task difficulty is at the student's instructional level to help avoid frustration and "giving up"
4. Teach note-taking strategies, and provide the student with frequent feedback on work performance
5. Introduce peer tutoring by a student with higher academic and better behavioral skills
6. Schedule more difficult classes and tasks for earlier in the day; follow non-preferred activities with preferred activities
7. Increase the novelty and interest levels of tasks through enhanced stimulation (color, shape, and texture).
8. Teach self-monitoring skills through the use of visual cues (such as visual rule reminders)
9. Revise task directions to be short, specific, and direct; reduce the number of words used to explain assignments
10. Allow students a choice of activities to reduce off-task behavior and improve task completion
11. Allow time for productive physical movement (e.g. planned stretching, watering plants, standing after completing work)
12. Increase tasks that require active versus passive involvement
13. Provide students with cross-modal feedback (e.g. provide verbal feedback on a visual task)

Psychosocial Interventions to Encourage Appropriate Behavior (adapted from Brock et al., 2009)

Behavioral interventions should be designed using functional assessment data, with a selection of a limited number of clearly defined behavioral targets. Contingencies should stress increasing desired behavior and reducing inappropriate or undesired behaviors and should include both positive and negative consequences. Reinforcements should be more frequent and more powerful than may be needed by other students.

1. Self-Monitoring protocols that involve reminders for a student to monitor his or her behavior
2. Token Reinforcement Programs that provide students with a token for appropriate behavior that can be exchanged for tangible rewards or privileges at specified times.
3. Response-Cost Systems that involve providing a student with a set number of points to start a day, and deducting points for problem behavior while allowing opportunity to earn points for appropriate behavior. Points are exchanged for a tangible reward or privilege at a set time.
4. Daily report card of behavior linked to rewards provided by parent on at least a weekly basis.

Disclaimer

The information gathered for this evidence-based practice sheet is a summary of common practices and/or programs with a strong research base and definitions found in recent literature. This summary is by no means a comprehensive representation of all information, definitions, programs, and standards to be found. In addition this information is not intended to provide any type of professional advice nor diagnostic service. The listing of a specific program within this sheet does not constitute as an endorsement from CDE for the program.

References

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- Power, T. J., Karustis, J. L., & Habboushe, D. F. (2001). *Homework success for children with ADHD: A family-school intervention program*. New York, NY: Guilford.
- Wolraich, M. L. & DuPaul, G. J. (2010). *ADHD diagnosis & management: A practical guide for the clinic & the classroom*. Baltimore, MD: Paul H. Brookes Publishing.

Resources

Center for Children and Families at Florida International University. Free ratings scales and interviews, fact sheets, and guidelines for behavior report cards.
<http://casgroup.fiu.edu/CCF/pages.php?id=1401>

National Resource Center on ADHD
<http://www.cdc.gov/Features/adhdresources/>

What Works Clearinghouse: <http://www.w-w-c.org/>

Children and Adults with Attention Disorders (CHADD)
499 N.W. 70 Ave. Suite 101
Plantation, FL 33317
(800) 233-4050 Rocky MT. CHADD (303) 761-5024
Web: www.chadd.org

Center for Disease Control ADHD Resources
<http://www.cdc.gov/Features/adhdresources/>

Parent Education and Assistance for Kids (PEAK)
611 N. Weber, Suite 200
Colorado Springs, CO 80903
(800) 284-0251 (719) 531-9400
www.peakparent.org

National Attention Deficit Disorder Association
1788 Second Street, Suite 200
Highland Park, IL 60035
847-423-ADDA
www.add.org

National Information Center for Children and Youth with Disabilities
P.O. Box 1492
Washington, DC 20013
(800) 695-0285 (202) 884-8200
www.nichcy.org