Understanding the Student With Attention Deficit Disorder

PART I

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hildren with Attention-Deficit Hyperactivity Disorder are probably the most misunderstood students in any educational system. Not only do they display a variety of symptoms, but the problems vary from one child to another. Even the experts have been unable to settle on a clear definition of ADHD or its incidence in the childhood population (estimates range from 5 to 20 percent).¹

So it is no wonder that educators are often puzzled as they try to recognize and help these students. Frequently the problems of these students are simply overlooked. Yet focusing on their needs can benefit the entire class. A number of specific interventions can make a difference in the learning experience of these students. This article will review some

recent findings and offer principles to help teachers understand and identify students with ADHD. Part II will present some practical suggestions for mainstreaming the ADHD child.

A Teacher's Description of ADHD

From a teacher's perspective, the three main symptoms of Attention-Deficit Hyperactivity Disorder—inattention, impulsivity, and possibly overactivity—produce a variety of behavioral problems. These include difficulty in staying seated, paying attention, working independently, completing tasks, and following directions and rules. ADHD children also can be disruptive.

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They tend to be very disorganized and have great difficulty keeping track of their books, pencils, and especially their assignments. School brings out a wider range of problems in these children than does almost any other setting.²

Associated Academic/Social Problems

According to Russell Barkley,³ a leading researcher in this field, more than half of ADHD children have significant problems interacting with teachers and classmates because of their oppositional nature. They tend to be more negative, demanding, stubborn, noncompliant, and physically aggressive than their peers. Approximately 25 percent have at least one type of learning disability, usually in math, reading, or spelling. More than 50 percent have poor motor coordination and many are notorious for their difficulties

with handwriting. ADHD children are likely to talk more during informal conversations (and even interrupt your class lecture!). However, they are less fluent when required to organize and generate speech in response to a teacher's demands. They use less efficient problem-solving strategies than other students. Their intellectual potential varies as does the rest of the population, although most of them do poorly in school.

Associated Health Problems

Twenty-four to 44 percent of ADHD children also have one or more of the following problems: anxiety, depression, low self-

esteem, and increased physical complaints such as headaches or stomach aches. They also tend to have more chronic health problems including allergies, increased sensitivity to fatigue, especially after the morning hours, and sleep problems.4

Inconsistency

Perhaps the most frustrating characteristic of all is that on occasion ADHD children will do well and not display the above symptoms. It's as though their brain occasionally "kicks in." This is often "held against them for the rest of their academic careers. They are seen as capable but merely lazy."5

Cause, Definition, and Incidence of ADHD

Recent findings6 point to a biological cause of ADHD—an abnormality in the prefrontal portion of the brain-"areas known to underlie aspects of response inhibition, inattention, and incentive learning." Research also suggests a genetic predisposition to ADHD, although a minority of cases are caused by brain injury. The effect of toxic substances during brain development and growth periods is being researched.7 However, there seems to be little doubt that symptoms can be exacerbated by many factors in these children's environment.8 Understanding the role played by their environment can have a major impact on the interventions used and the outcome for ADHD chil-

The criterion for defining ADHD is changing. In the past we assumed that the three cardinal symptoms were hyperactivity, inattention, and impulsivity. However, we now know that some children have attentional problems but are not hyperactive.9 Some are even hypoactive or attend too much.10 Certain researchers are questioning whether these are different disorders. Others are debating whether ADHD is a cognitive learning disability of the working memory,11 a behavioral disability of motivation, or a deficit of rulegoverned behavior-all of which affect attention.12 These same researchers are also debating which come first-attentional or behavioral deficits.

Every classroom probably has at least one ADHD child, since approximately 5 to 6 percent of the childhood population is affected (some studies estimate up to 20 percent). These children come from all walks of life, although boys are three times as likely to have ADHD than girls. Both

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genders display the same pattern of symptoms, and the problems generally continue into adolescence and adulthood.

Although the understanding of this disorder is progressing, the treatments may remain much the same. Therefore, we must "accept the developmentally disabling nature" of this disorder and not hesitate to use the existing treatments.13

Usual Response to Symptoms

Teachers and parents often react to the problems of ADHD children by becoming more controlling, commanding, and negative in their interactions. These reactions produce additional negative behaviors in these children, causing even more intense reactions by authority figures. This pattern can escalate until the authority figure gives up, rejecting the child who has now become seriously hostile, defiant, and antisocial.14 A major goal of intervention is to break this pattern.

Implications for Teachers

When we understand that ADHD is a biological handicap and that problem behaviors are, to a certain extent, beyond the child's ability to control, it can help us respond without blame, anger, rejection, or abuse. Instead we can provide an environment and strategies that help the child to learn "to cope with his handicap and maximize his or her ability to meet responsibilities."15 Parents and teachers would never dream of punishing a diabetic child for an insulin reaction, yet we regularly punish or chastise ADHD children for their biochemical disorder. These children usually have no internal motive to irritate purposefully.16

Because they often initiate inappropriate behavior and cannot predict the outcome of their actions, children with ADHD can become repeat offenders in the classroom. Although the teacher can usually reason one-to-one to help these Picture Removed

children predict the logical consequences of their behavior, in a group this ability seems overwhelmed, and they revert to acting first and thinking later.¹⁷

These children are not "bad" in the ordinary sense. They have a biological deficit. They desperately need opportunities and structure for success, with more positive and fewer negative strategies from the adults in their lives.

Amajor goal of managing treatment is to provide external structure in these children's daily routines and environment to make up for their lack of internal controls. These accommodations allow them to have more success experiences.

Teachers must accept the fact that both giftedness and disabilities can exist simultaneously. The success of an ADHD student does not depend on a watered-down curriculum but on alternative ways to receive information.¹⁸ To learn, those with learning disabilities need different approaches, not just slower traditional techniques. Most are far brighter than their performance would indicate in traditional educational settings.

ADHD seems to cause students to reduce their effort on tasks that have little internal appeal or few immediate consequences for completion.¹⁹ Material must be well-presented, concise, and geared to

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their intellect to engage their attention. They also need rewards or consequences to make up for their lack of internal motivation.

Providing external rewards or consequences is quite a task when most of the schoolwork is "sit down, be quiet, and do your workbook." ADHD students perceive this type of work as dull and boring. Educators may need to consider more thought-provoking, creative, and meaningful approaches. One educator and parent of an ADHD student, Constance Weaver, 20 feels this is why the philosophy of "whole language" education offers so

much promise for these children. This approach seems to bring out less of the ADHD child's disability. Such a curriculum is shaped to meet the needs of the children and emphasizes their strengths. It avoids workbooks and encourages alternative research experiences. While fostering independent thought, it also allows for mobility and collaborative learning. Most of all, this approach helps teachers to tolerate individual differences because the curriculum provides for them. ADHD children will still need some behavioral management, but a whole lot less.²¹

Because of ADHD's biological origin, medication can increase affected students' attention span and improve their control of impulsive behavior and negative moods. After taking the prescribed medication, many experience more positive interactions with their parents, teachers, and peers, often for the first time in their lives. The results are short term, lasting only a few hours after each dose. Therefore, medication is not a cure. ADHD children need additional interventions, depending on the severity of their symptoms and the presence of other disorders. Since several medications can be used and some children cannot take any, a medical doctor or a psychiatrist specializing in ADHD must evaluate each child carefully.

In summary, the ADHD child's behavioral and academic problems are biochemical and are worsened by parents' and teachers' failure to understand the disorder. Therefore, adults must provide the external structure and motivation these children so desperately need until they develop their own coping strategies. Understanding these children can lead us to respect them for coping as well as they

Next we will describe some of the ADHD child's strengths. These can be marvelous to work with if you are creative and can enjoy a child who often marches to a different drummer.

Outcome

Dr. Melvin Levine speaks of the positive features of each cardinal symptom of ADHD.²² These children's apparent inattention to detail may be associated with an enhanced capability to see the "big picture." ADHD children are very creative and think of ideas that the more disciplined mind often misses. This is why alternative methods of research (not just fill-in-the-blanks) can really tap their intellect. However, they may read into test questions thoughts the teacher never dreamed, yet are valid to consider when answering. This can be frustrating to both teacher and student.

Impulsivity may help these children to accomplish a great deal. Their apparent insatiability often prods them to find the better idea, product, or way of doing things. For example, they may obtain the same answer using a different process. This may be difficult for a teacher to accept. Such students often get into trouble when they have to "show their work" while doing math problems.

Hyperactivity can be channeled to accomplish many things. Despite their oppositional tendencies, ADHD individuals often have a superb sense of humor and appealing personality, leadership skills, and an unquestionable individuality. The latter often gets them into trouble with the authority figures in their lives.

As with any student, the outcome is better if the child has support and a stable family. Of course, milder ADHD symptoms also mean a better prognosis. Many youngsters with ADHD become successful adults, even attending college, having learned to use their strengths to cope

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with their weaknesses. The outcome is much poorer for those without positive experiences in the family and school. The ADHD child's environment determines the final form of his or her deficit.23 @

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Look for Part II, which will give some practical suggestions for making the school environment more tolerant of the ADHD child's differences. in the April-May 1993 issue.

NOTES AND REFERENCES

- 1. Russell A. Barkley, Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment (New York: The Guilford Press, 1990), p. 61.
 - 2. Ibid., p. 498.
 - 3. The following statistics are taken from Barkley,

- pp. 498, 92, 77-79, 75.
 - 4. Ibid., pp. 80, 81, 83, 59.
 - 5. Ibid., pp. 46, 47, 60.
 - 6. Ibid., pp. 98, 102, 104.
- 7. Barbara McElgun, "Protecting the Brain: Progress in Neurotoxicity Testing," LDA Newsbriefs 27:4 (July/ August 1992), p. 6.
 - 8. Barkley, p. 104.
- 9. Ibid., pp. 47, 91; Mark Driscoll and Steven Zecker, "Attention Deficit Disorder: Are There Subtypes? Learning Disabilities 2:2 (August 1991), p. 55.
- 10. Marcel Kinsbourne, "Overfocusing: Attending to a Different Drummer," CH.A.D.D.ER 6:1 (Spring/ Summer 1992), p. 23.
- 11. Miriam Cherkes-Julkowski and Jonathan Stolzenberg, "The Learning Disability of Attention Deficit Disorder," Learning Disabilities 2:1 (February 1991), pp. 8-13.
 - 12. Barkley, p. 41.
 - 13. Ibid., pp. 63, 61, 65, 66, 114, 613, 38.
 - 14. Ibid., pp. 139, 168, 499.
 - 15. Ibid., p. 473.
 - 16. Ibid., p. 46.
- 17. Robert A. Moss, Why Johnny Can't Concentrate (New York: Bantam Books, 1990), p. 19.
- 18. Eric Clearinghouse on Handicapped and Gifted Children, "Gifted but Learning Disabled: A Puzzling Paradox," Outlook 24:1 (July-August 1992), pp. 4, 6.
 - 19. Barkley, p. 41.
- 20. Constance Weaver, "The Promise of Whole Language Education for Students With ADHD," The CH.A.D.D.ER Box 5:4 (May 1992), pp. 1, 7, 8.
- 21. Constance Weaver, "Alternatives in Educating Attention Deficit Hyperactive Students." Unpublished article, 1992. To obtain a copy of the article, contact Ms. Weaver at Western Michigan University, Kalamazoo, Michigan. Telephone number: (616) 387-1000, extension 2599.
- 22. Mel Levine, Keeping a Head in School (Cambridge, Mass.: Educators Publishing Service, Inc., 1990), p. 37.
 - 23. Barkley, pp. 128, 129, x.