Pediatric Neuropsychology

The following article was written by Norma J. Cohen PhD, licensed psychologist, and is reprinted from Meeting Ground, the newsletter of the Courage Center, Minneapolis, Minnesota.

There are many different terms used by many different people who deal with problems in children's thinking skills. Terms often mentioned include learning disabled, retardation, memory deficits, achievement, attention deficit disorder and IQ. Often, there may be as many as 8 or 10 different health care professionals involved in diagnosing and developing a treatment plan to address these thinking skills. For many parents, and for the children themselves, this can be very confusing.

I am going to suggest just what most parents probably don't want to hear: that children be allowed to undergo a neuropsychological evaluation—a lengthy and comprehensive assessment of the child's thinking skills from a different perspective than is usually available.

The Neuropsychological Evaluation

What does a neuropsychologist do? A neuropsychologist looks at all the different types of thinking skills that are present in each child and combines this information with reports from many other sources, such as schools, parents and doctors. An attempt is then made to determine the strengths and weaknesses of a child's thinking.

During a neuropsychological evaluation, a child is given a series of thinking skills tests designed to assess how he/she solves many different kinds of problems. Some involve memory, some involve word problems and some involve visual problems (such as puzzles). These should always include some assessment of general intelligence, language skills achievement, planning, memory and attention/concentration skills.

Testing often takes four to eight hours of face-to-face contact between an evaluator and a child. Because of the length of the testing, it usually occurs over two to three sessions. While many children do receive testing through their schools, a neuropsychological evaluation is always longer, more comprehensive and can better account for the needs of children with disabilities.

There are special challenges in testing the child who has a disability. They may have difficulty showing what they can do, even if they are thinking well. For example, some children with motor problems cannot talk, simply because they cannot move their mouth muscles well. But one should not assume that because these children don't talk, they are not smart or don't understand what is being said. Careful assessment may reveal that they do understand many things that are going on around them, and, with the proper method of response, can demonstrate their understanding of words.

A neuropsychologist should take into account specific disabilities and choose tests that allow a child to show his/her intelligence in spite of the limitations imposed by a disability.

Assessing the Results

After a neuropsychologist finishes testing a child, the tests are scored to see how the child performed in comparison to other children of the same age and to general developmental expectations for the child's age group. The neuropsychologist may then suggest specific kinds of treatment for specific kinds of thinking-skills problems.

For example, some children have difficulty doing tests that require careful step-by-step planning. They are good at answering short, quick problems. These children may be taught techniques to stop and slow down their thinking, rather than jumping to conclusions, as well as ways to solve step-by-step planning.

Other children may work with school professionals—such as occupational therapists, special education teachers and speech pathologists—to address other kinds of thinking-skills problems, such as problems with understanding visual information, and problems with learning skills based on language, such as reading. In this way, it is hoped that a neuropsychologist can help create one single treatment plan that reflects the findings for only of the tests but of the family, school personnel and other professionals working with the child.

Conclusion

A positive outcome of testing occurs when a neuropsychologist can describe the patterns of strengths and weaknesses in a child's thinking, so that parents, school staff and, if old enough, the child herself can better understand these thinking skills. Often, just this understanding of a child's skills can be a great relief.

Even more important, I believe a neuropsychological evaluation can result in a specific plan designed to improve the child's ability to succeed in school, at home and everywhere else as he/she faces the different kinds of thinking skills and decision-making tasks we all face day to day. A good neuropsychological evaluation creates a plan that in turn leads to the child becoming more able to do various kinds of tasks, to feel happier and more self-confident and to be better integrated into family and school life.

Editor's Note

Dr. Cohen promises another article on this subject, defining some of the common terms used to describe a child's thinking skills. We'll be on the lookout for it and will pass it along to our readers in a future issue.