***SLI - What We Know and Why It Matters***

*by Margaret Ervin*

There are numerous disorders and syndromes that affect children's language ability. Many have broad name recognition--Down syndrome and autism, for example. Familiarity with these labels comes through the media and through being involved in schools as parents, teachers, and students. But ask people whether they have heard of specific language impairment (SLI), and the answer will be a resounding "no."

Specific language impairment is characterized by difficulty with language that is not caused by known neurological, sensory, intellectual, or emotional deficit. It can affect the development of vocabulary, grammar, and discourse skills, with evidence that certain morphemes may be especially difficult to acquire (including past tense, copula be, third person singular). Children with SLI may be intelligent and healthy in all regards except in the difficulty they have with language. They may in fact be extraordinarily bright and have high nonverbal IQs.

Children with SLI usually learn to talk late. It is not unusual to first encounter a child with SLI at age 3 or 4 years, with limited vocabulary and short utterances. Later on they are likely to be the kinds of kids who are told by well-meaning parents and teachers that they are smart but unmotivated and that they just need to try harder.

**What We Know About SLI**

The incidence of SLI was recently estimated in a study funded by the National Institutes of Health to be 7.6% among 5-year-old children. This compares with well under 1% for Down syndrome and autism, to use just two examples of disorders with a secondary effect on language development. One study showed that 70% of children tested at age 5 and diagnosed with SLI continued to have low language performance at age 18 to 20. Studies also indicate that if a child has SLI there is about a 25% chance that another family member will be similarly affected. However, in these family/genetic studies, SLI is rarely found in isolation. Over 75% of affected individuals also meet criteria as reading-impaired and/or auditory-rate processing impaired.

SLI is a disorder with long-term impact it's not just a matter of late language acquisition or something that children can grow out of. Mabel Rice of the University of Kansas describes the 35-year-old father of a child with SLI, a businessman in a management position. When he sits down to complete a grammaticality judgment test, the underlying trouble with language comes out. "He struggles over questions that the average 7-year-old would zoom through," Rice says. He's able to be successful in his job, but that isn't because he has shed his problem with language now that he's older. "Individuals who are bright and self-aware find ways to avoid what they have trouble with and often find ways to succeed despite their language impairment. But not always," Rice says.

Research has recognized some of the markers of SLI, so it can be identified through targeted tests rather than through a process of elimination. Rice's work has focused on the grammatical markers of SLI. Her research has identified morphemes that hallmark the disorder. A new diagnostic test coauthored by Rice, titled Test of Early Grammatical Impairment and specifically designed to be administered by speech-language pathologists, will be published in October 2001 by The Psychological Corporation.

**SLI and the Practitioner**

SLPs have been at a disadvantage in identifying and treating SLI because the conventional definition includes an IQ of 85 or above, and SLPs usually do not administer intelligence tests. The most recent SLI literature is re-evaluating the possible value of nonverbal intelligence criterion for research studies. For clinical purposes, the positive markers that have been identified such as the grammatical morphemes identified by Rice and and her colleagues seem to apply to children whose nonverbal IQ is lower than the SLI definition.

SLPs also are not likely to encounter the term "specific language impairment" because the labels they use are often determined by state eligibility criteria. Although these criteria vary from state to state, SLI is typically absent from the educational classification systems. The broad DSM categories under which SLI falls are mixed receptive-expressive language disorder or expressive language disorder. Other terms among the many that can encompass the disorder are "speech/language impairment" (sometimes also abbreviated as S/LI), "speech delay," "language delay," "developmental language disorder," and "persistent language impairment."

Although SLI is not a reading disability, 50% to 75% of children with SLI also have reading disabilities. Pam Hadley of Northern Illinois University says she hears from practitioners who have been working in the schools for 30 years and who wonder why there are so many more children with primary language disorders today. Hadley doesn't believe the incidence has risen, but that the literacy push of the last decade has increased awareness of the link between early language disorders and problems with literacy, resulting in improved early identification.

Laurence Leonard of Purdue University notes that children meeting the definition of SLI have been known to clinicians and researchers for more than 150 years. Terminology has changed over the years, possibly giving the impression that this is a "new" disorder. Previous terms included developmental aphasia and later developmental dysphasia, terms that were dropped because they implied neurological damage that could not be documented.

Paula Tallal of Rutgers University says, "I have tried for years to get the public press to use the term 'specific language impairment' when reporting on my work. But no matter how hard I have tried, they always change it to dyslexia in the media. I think that if the field had stuck to the original term, developmental aphasia, which sounds more like a medical syndrome, language disorders might be better understood and recognized."

**What' s in a Name?**

Does it matter that children with SLI are lumped into more general or less accurate categories that do not specifically describe their disorder, as long as they receive the same treatment they would receive with the SLI label?

"In one sense, the answer is no," says Janna Oetting of Louisiana State University. However, she says her interest has been in the researcher-to-clinician dialogue, and she feels that it's important to make use of the term SLI and the research behind it. "When kids are given the general label 'late talker' and get some speech therapy, there often isn't follow-up with the parents to talk about what to expect later. If we had more categories, there would be more of a reason to talk. We continue with the same treatment, which is quite appropriate, but we don't inform the public that we know there are multiple causes for children who are late talkers."

Hadley is currently working on a grant to improve the ability to identify which late-talking children in the 2- to 3-year-old age range will outgrow their problem. She says, "As far as what we' re going to do clinically, we don' t need a label, but if what you as a parent want is the nature of the condition, using a term like 'language delay' isn' t going to help you. You won' t find 'language only' problems at the bookstore or on the Internet. You'll feel like you' re the only parent whose child has this problem."

**What It Is Like to Have SLI**

Rice, Hadley, and Oetting say families find it helpful to just be able to tell people with certainty that their child is good at a lot of things but has trouble with language. These children aren't socially inept, lazy, or unmotivated. It helps to understand that children come with different capacities, and that the family isn't responsible for the language deficit.

Children who struggle with SLI say the same thing, and if there is an SLP working with them, that validates them and gives them a source of information and support. It's better to understand what is really going on. Rice says that if you want to understand how a child with SLI feels, think of the experience of being immersed in a foreign language. "You know what you want to say, but you can't say it. You look socially inept. You aren't stupid, but people might think you are."

Using a similar analogy, Tallal says, "When you are listening to a foreign language, you often wish that people would just slow down so you can understand them better. Teachers and parents may think that you have an attention deficit disorder, but it is difficult to sustain attention to input you are struggling to perceive correctly."

Rice believes strongly that SLPs have an important role in helping children with SLI. "Our practitioners should feel extremely proud," she says. SLPs of course help children with the strategies and exercises that will help them navigate language. They are also the ambassadors of language who help other educators understand not only what goes wrong, but what goes right. Understanding SLI brings us a long way toward understanding the miraculous phenomenon of human language itself.

Margaret Ervin, is ASHA's Web content and community producer and a former contributing writer to The ASHA Leader.

*cite as: Ervin, M. (2001, June 26). SLI - What We Know and Why It Matters. The ASHA Leader.*