

# Disorders of Speech and Language

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If your child has been scheduled for a speech and language evaluation, the child may have a speech and language *disorder* or delay. This article will describe some of the types of disorders. When your child has a speech and language *evaluation*, the evaluator will look for these signs of a particular problem:

## 1. Disorders of Language Form

A child may fall behind other children in phonological (speech sound) development or understanding and use of *grammar*. These two problems—*phonology* and *grammar*—often occur together, since they are both aspects of language form. Children with these problems frequently omit word endings. They often do not develop forms such as plurals, past tense verbs, complex verb forms, or other grammar forms at the age that most other children do.

The child with phonological problems often shows some kind of speech pattern. Some of the most common are omitting the last sound in a word (as in "how" for "house"), substituting one sound for another (as in "pork" for "fork" or "toup" for "soup") and omitting one sound from a *consonant blend* (as in "nake" for "snake"). The evaluator tries to discover the child's patterns so that therapy can correct the whole pattern, rather than just a few individual sounds that are in error.

The evaluator is also concerned with whether the child's speech is clear or *intelligible*. How well is the child's speech understood by others? Often the child's speech is more understandable to the family than to friends or strangers. Sometimes it's hard to tell. Many people often act as if they understand a young child, even when they don't. Notice how often your child has to repeat words or phrases when talking with a person outside the family. A child's speech is described as *unintelligible* when other people almost always misunderstand the child.

## 2. Disorders of Language Content

A child who has difficulty understanding words or choosing words to express ideas usually has a content problem. The young toddler who is still not talking is one example. This child may even show the ability to understand words and sentences as well as other children the same age.

But the child is not using words to express meaning. Some children who do talk may substitute one word for another word with a similar meaning, or for a word that sounds similar. They may use vocabulary more typical of a younger child. They may repeat words or syllables. A common problem is found in children who have difficulty understanding or using *concept* words. These are words that describe:

- Position (such as in, at, under)
- Time (when, first, before, later)
- Quality (big, hot, pretty)
- Quantity (more, some, none, one, two, etc.)

These children often have difficulty with both language form and content, since they are struggling to choose the right words to express their meaning. These children may also be unsuccessful in the area of language use. They may have difficulty understanding questions or conversation directed toward them, and may respond incorrectly or inappropriately.

## 3. Disorders of Language Use

The child with disordered language use does not use language for the variety of purposes and in the variety of situations available. The child may rely on non-verbal or limited means of communicating. A child who is developmentally delayed, physically handicapped, or mentally retarded may not be given as many opportunities to develop language as other children. The family may not expect the child to use words to ask questions or to express thoughts and feelings.

In fact, one of the most striking features of many language delayed children—not just those with mental retardation—is that they rarely ask questions. In their conversations with adults and other children, they generally answer questions. They do not seem to take turns in a conversation. They let the adults do most of the talking. In contrast, children without language problems show much more balance in answering and asking questions. They are able to take turns in a conversation more easily.

## 4. Articulation Disorders

Sometimes a child does not make speech sounds correctly due to incorrect placement or movement

of the articulator muscles (lips, tongue, velum, pharynx). This may be caused by a physical problem interfering with speech production, such as impaired muscle ability, a short tongue length or cleft palate. An oral examination should tell the evaluator if the child's errors on speech sounds are due to a muscular or structural problem.

The evaluator assesses the strength and use of the muscles in the lips, tongue and jaw, and observes the child's swallowing pattern. If the child has an immature swallowing pattern, it can interfere with the normal alignment of the teeth. The child might have an overbite ("buck teeth") or an open bite (a space between the upper and lower front teeth). Children with these problems are sometimes referred to an orthodontist (dentist who straightens teeth).

### 5. Voice Disorders

The most common voice problem in children is *vocal nodules*. These are hard calluses that develop on the *vocal cords*. They cause the child's voice to be hoarse or sometimes weak and breathy if they are very large. They are sometimes called "screamer's nodules" since they are caused by vocal abuse such as screaming, talking at the wrong *pitch*, frequent coughing or throat clearing, or even constant loud talking. This kind of abuse of the vocal cords can also lead to *polyps* (soft, fluid-filled growths) or *contact ulcers* (ulcers on the vocal cords).

The child with a voice problem should always be seen by an ear, nose, and throat doctor. Any hoarseness or vocal strain that lasts for more than two weeks should be investigated by an ear, nose, and throat doctor. The ear, nose, and throat doctor may suggest a speech evaluation by a *speech and language clinician*. The evaluation will consist of:

- Listening to the child talk.
- Seeing how long the child can make a sound (say "ah-h-h-h-h" as long as you can).
- Determining the child's pitch range and typical pitch.
- Exploring what kinds of vocal abuse the child is engaging in and how frequently.

### 6. Rhythm or Fluency Disorders

Children who have difficulty saying sounds, words, and phrases in a smooth flow may have a *fluency disorder*. One such disorder is stuttering. A child of any age can be brought in for a speech evaluation if the parents think the child

is stuttering. It is true that many children outgrow stuttering. But it is also true that the most effective time to help children with a stuttering problem is in the preschool years.

In the evaluation, the speech and language clinician will want to observe whether the following behaviors occur in the child's speech:

- *Repetitions*: The child may repeat a syllable ("bu-bu-butter"), a word ("I-I-I-I want to go"), a phrase or a whole sentence. In general, the more times the child repeats a syllable or word, the more serious the problem is. Similarly, the child who repeats syllables and words is considered to have a more severe problem than a child who only repeats phrases or sentences.
- *Prolongations*: The child may prolong a sound such as "s" or "t," as in saying "s-s-s-sock." In general, the longer the prolongation lasts, the more serious the problem is.
- *Use of the schwa*: Most of us say "uh" while searching for a word or phrase to express our thoughts. The young child learning to talk may also use "uh," which is called the "schwa" sound. However, if this occurs often, along with repetitions or prolongations, it usually indicates a fluency problem.
- *Signs of tension*: The evaluator looks for signs of tension in the face or body when the child speaks. The child may blink or squeeze the eyes shut while trying to say a word. The voice of the child may sound tense, indicating tension in the vocal cords.

The evaluator also needs to know if there is a family history of stuttering, since this problem seems to be hereditary in some cases. The evaluator will explore what situations make the child stutter more, and which situations help the child be more fluent. The evaluator will try different activities to get the child to speak fluently. The evaluator will also want to thoroughly evaluate the child's language skills.

Some stuttering problems seem to be related to delayed vocabulary development. Some language problems, such as a word-finding problem, may make the child sound like a stutterer.

## Vocabulary

*Articulation*—The production of speech sounds.

*Concept*—A general idea or characteristic applicable to several objects or events, which helps to organize knowledge about the world.

*Consonants*—The sounds made by stopping or restricting the outgoing breath.

*Consonant blend*—Two or more consonant sounds spoken together, such as “sn,” “tr” and “ch.”

*Developmentally delayed*—A child who acquires specific skills after the expected age.

*Fluency*—The smooth flow of speech.

*Grammar*—Rules governing how words are combined in sentences.

*Impairment*—Physical weakness or damage, or a functional problem.

*Intelligible*—Clear, understandable speech.

*Language disorder*—Any difficulty in understanding and using language.

*Language form*—The ways in which language units of sound and meaning are combined with one another.

*Phonology*—The study of speech sounds and the rules governing how they are combined to convey meaning.

*Pitch*—The sound quality associated with high or low frequency of vibration, like high or low musical notes.

*Schwa*—The “uh” sound.

*Vocal cords*—Muscles in the larynx which produce speech sounds by vibrating.

*Vocal nodules, polyps or ulcers*—Various growths on the vocal cords usually caused by abuse or misuse of the voice.

### Refer to:

- 1.2 The Speech and Language Evaluation
- 2.1 Language Development
- 2.2 Speech Development
- 2.3 Cognitive Development
- 4.7 Turn-taking and Conversation
- 6.1.3 How You Talk With Your Child is Important!
- 6.1.4 Simplify Your Language to Help Your Child Understand
- 6.3.1 Protecting Your Child's Voice
- 6.4.1 - 6.4.5 Articles on Fluency