

# Disfluent Speech Behavior in Children

by Daniel DeJoy, Ph.D.

## Introduction

When we say that someone speaks "fluently," we mean that the person's speech flows easily. Sounds combine into syllables, syllables blend into words, and words link into sentences with little effort. When someone's speech is "disfluent," it is uneven and does not flow smoothly. A **disfluency** is a break in the smooth, meaningful flow of speech.

It is understandable that all of us have occasional interruptions in our speech. Talking is not automatic. To communicate new thoughts and feelings, we create sentences we have never spoken before. Thus, speaking is a creative, decision-making process.

Children who are still learning language and communication skills are developing *coordination* of the muscles used for talking. They are learning new words and new sentence structures at a rapid rate. Also, children must discover how to inform, persuade, and question their listeners. Is it any wonder that children may speak disfluently from time to time?

## What speech behaviors are disfluencies?

### 1. Repetition

Children may repeat individual sounds or syllables, usually at the beginning of words ("The baby ate the s-soup" or "The ba-ba-by ate the soup"). Also, children may repeat whole words ("The-The baby ate the soup"). Finally, youngsters may repeat more than one word in a phrase or sentence ("The baby-The baby ate the soup").

### 2. Interjection

Interjections are extra sounds, syllables, or words that add no meaning to the message. Probably the most common interjections are "uh" and "um" ("The uh baby ate the soup" or "The baby um ate the soup"). Words or phrases such as "well," "like," and "you know" are considered to be interjections.

### 3. Pauses

Pauses or silent intervals between words may be considered a type of disfluency, depending upon when they occur and how long they last. Pauses

are often needed to separate phrases or thought units ("The baby ate the soup [pause] and then went to sleep"). However, speakers sometimes pause within a phrase or thought unit ("The [pause] baby ate the soup" or "The baby ate the [pause] soup"). These interruptions can be considered disfluencies, especially if they last over two seconds.

### 4. Revision

Children frequently revise what they have just said. They may stop in midstream and start over in a new direction. Revisions may be in pronunciation ("The bady-baby ate the soup"); grammar ("The baby eated-ate the soup"); or word choice ("The daddy-The baby ate the soup"). A child also may go back to add a word ("The baby-The hungry baby ate the soup").

### 5. Mis-timing

Words can be mis-timed when spoken. Sounds or syllables may be *prolonged* ("The baby ate the s-s-soup" or "The baaaby ate the soup"). There could also be a break in the word ("The ba-by ate the soup"). Varying amounts of tension in the speech muscles (lips, tongue, vocal cords, etc.) may accompany these mis-timed words. Sometimes, the voice sounds strained or the coordination of breathing and speaking breaks down.

## What causes disfluencies?

Children may be disfluent for a number of reasons. Rapid growth in language during the early preschool years is a frequent explanation. Preschool children begin to talk about more complicated ideas. Since there are several different ways to express those ideas, decisions about what to say and how to say it become more difficult. For example, when your child uses a newly learned sentence form, such as a question, the ordering of words may be confusing at first. Early questions may sound like "what he doing?" When the child begins to use "is," there may be some disfluency focused around that particular word: "What um is he doing?" or "What-What-What is he doing?" or "What he-What is he doing?"

Children must also decide what word to use to communicate their meaning most accurately. We all have had tip-of-the-tongue experiences. We knew exactly what we wanted to say but could not think of the specific word to use. We paused, said "uh," or held off the listener with "you know what I mean" until we remembered the word. Similarly, children may pause silently, interject "um" or other sounds, or repeat a word or phrase as they search for a word.

Another possible explanation for some disfluency is an occasional lack of coordinated movement among the lips, tongue, and jaw. You have probably heard your child mispronounce certain sounds in words (wabbit/rabbit, pease/please, pence/fence). Sometimes, children mis-time the rapid movements for speech, confuse sequences of sounds, or simply mispronounce a word. The result may be disfluencies such as word repetitions, prolongations, broken words, and revisions.

If a child feels pressure to perform, finding the right word, constructing sentences, and/or coordinating the speech muscles may not be accomplished smoothly. A child who is nervous—or becomes excited and must say a million things all at once—may become quite disfluent.

### **What disfluencies are common or "normal"?**

Children seem to be most disfluent during the preschool years. Generally, revisions, interjections, and word and phrase repetitions are very common in children's speech. Sound and syllable repetition, sound prolongation, and broken words are less common. As children reach school age, certain types of disfluencies, such as repetitions, become less evident in their speech. However, there is a wide range of behavior considered to be normal. Most children show each type of disfluency from time to time. This is considered to be "normal disfluency."

While disfluency is common in most children, certain patterns of disfluent speech are not quite as typical. First, if your child is very disfluent in most speaking situations, it may signal a problem in putting thoughts into words. If a child's sentence structures or pronunciation skills appear immature, then finding the right word or blending sounds into words may be more difficult. Also, it is not as common for a child to show a great many interruptions in the smooth flow of individual words (sound or syllable repetitions, broken words or prolongations).

### **What is the relationship between stuttering and normal disfluency?**

Many experts have studied the relationship between childhood disfluency and "stuttering." Stuttered speech contains a number of disfluencies that interrupt the smooth flow of individual words. Some authorities have emphasized the similarities between stuttering and normal disfluency. One reason for this view is that almost all children show breaks in the smooth flow of individual words from time to time. Also, many children who begin to stutter seem to do so during the preschool years when normal disfluency is quite frequent. Thus, it is logical to think of stuttering as an outgrowth of normal disfluency.

Other speech clinicians have viewed stuttering as quite different from normal disfluency. They have emphasized the greater frequency of mis-timed words, often more than five instances per 100 words spoken. In addition, disfluencies may last longer than two seconds due to the duration of prolongations (The s-s-s-soup); more repetitions of a speech unit (The ba-ba-ba-baby); or tensing and struggle involving the disfluency. Through facial expression and tension, the child may show that the disfluency is a frustrating problem.

The Speech Foundation of America has published a list of "Warning Signs" related to disfluency. The presence of some of these behaviors may indicate that the child is having disfluency and beginning to react to the interruptions:

1. Frequent sound and syllable repetition
2. Syllable repetition in which an "uh" vowel replaces the correct vowel in the word ("puh-puh-peach" rather than "pe-pe-peach" )
3. Frequent prolongations of sounds that become longer in duration
4. Tremors (trembling of muscles) around the mouth and jaw during speech
5. Rises in the pitch or loudness of the voice during the prolongation of sounds
6. Tension and struggle behavior while saying certain words
7. A look of fear in the child's face while saying a word
8. Avoidance of or delay in saying certain words

**Should parents respond in any special way to their child's disfluency?** First, view most disfluency as a natural part of the speaking process. Fluency—just like vocabulary, sentence structure, and pronunciation—develops gradually. It takes time and practice for most children to acquire the speaking skills that probably will lead to reduced disfluency.

Second, try to observe your own behavior as you talk with your child. If you speak at a rapid rate or find yourself interrupting, try to slow down a bit. Let your child have as much time as needed. Also, your eye contact, facial expressions, and vocal tone can be important signs to your child that you are interested in what the child is saying. If a child understands that you are interested and patient, then feelings of time pressure may be minimized.

The cooperation of other family members is also important. For example, households with several children may want to establish certain rules for turn-taking in conversations. At the dinner table, one person at a time gets to talk without interruption from others. This reduces the time pressure placed on your child and makes conversation more fun.

### Summary

If your child's speech is characterized by a number of the "Warning Signs" described by the Speech Foundation of America, then you may want to contact a certified *speech and language clinician* for an *evaluation*. Seeking professional advice would be especially appropriate if your child's disfluency has been of concern for six months or more. It is important for you to

understand that you are not at fault. No one is to blame. Some children, for reasons still not well understood, begin to show disfluency patterns. Many children are very disfluent for a period of time and then "grow out of it."

### Vocabulary

*Coordination*—Muscles working together harmoniously to perform movements.

*Disfluency*—A break in the smooth, meaningful flow of speech.

*Evaluation*—Tests used to measure a person's level of development, or to identify a possible disease or disorder.

*Interjection*—A meaningless sound or word which breaks the smooth flow of speech.

*Prolong*—To lengthen or stretch out in time.

*Speech and language clinician*—A person who is qualified to diagnose and treat speech, language, and voice disorders.

*Stuttering*—Disturbance of the normal fluency and timing of speech.

*Tremor*—The trembling or shaking of a muscle group.

### Refer to:

- 6.4.2 Talking With a Child Who Stutters
- 6.4.3 Stuttering: Early Intervention Therapy
- 6.4.4 Stuttering Therapy for School-Age Children
- 6.4.5 The Confirmed Stutterer