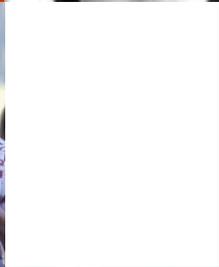
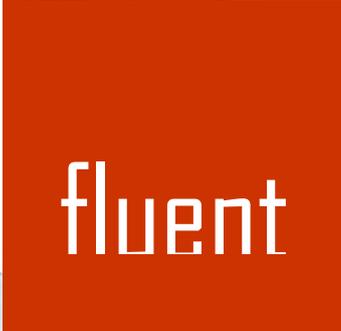


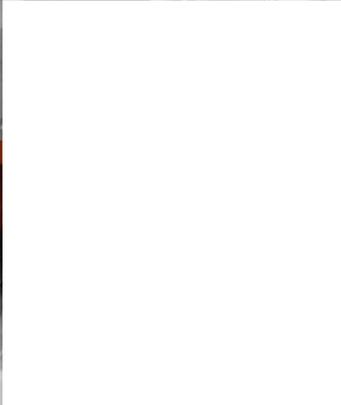
Stuttering



positive



confident



STUTTERING

An excess of repetitions, prolongations and hesitations can severely disrupt the smooth, fluent flow of speech, leading to stuttering (**stammering**). People with established stutters are aware of the negative effect of these on their speech. Their stutter may incorporate blocks and be accompanied by facial tics and uncontrolled body movements. The cause is unknown but neurological development, parental reaction, trauma, and a predisposition to stuttering have been suggested. Stuttering can lead to the avoidance of certain activities and to social isolation.

FEATURES OF STUTTERING

During the course of a conversation most speakers make several unplanned repetitions of words or syllables, prolongations of sounds, and hesitations. These features of talk tend to break up the smooth, fluent, rhythmical flow of speech and create **dysfluency**. Each of these features of talk is described briefly below.

REPETITIONS

There are four broad types of repetition exhibited in talk. These are repetitions of:

- **sounds** e.g. *I w...w...w...won't*
- **syllables** e.g. *it's my bo...bo...bo...bottle*
- **words** e.g. *the boy has...has...has...has it*
- **phrases** e.g. *I want to...I want to...I want to go*

We all make several unplanned repetitions in the course of a conversation: this is quite usual. For children between 3;00-4;00 years of age about 90% of the repetitions they make are repetitions of words and phrases. Less than 10% of repetitions are of sounds or syllables.

PROLONGATIONS

During natural talk, certain speech sounds may be prolonged:

- **consonants** e.g. *wwwww-what is it?* and *shhhhh-show me*
- **vowels** e.g. *daaaaa-ddy, muuuuu-mmy*

Prolongation of consonants is more common than prolongation of vowels. As a general rule, however, these prolongations last less than one second and usually occur less than once per 100 words spoken.

HESITATIONS

This is another fairly typical feature of most people's speech. The person may be engaged in some lengthy conversation, responding to a question or whatever, and he or she pauses for a moment before continuing with an utterance. Such hesitations can appear anywhere in an utterance, at the beginning, middle or end. There are two types of pauses:

- **silent** e.g. *and I went...(pause for 3 seconds)...home then*
- **filled** where the silence is filled with vocalizations such as *erm, uh, oh*, e.g. *and I went...erm...home then*

People who stutter are typically identified as having an excess of repetitions, prolongations and hesitations in their speech. It should be apparent from the foregoing discussion, however, that the range of what is considered typical fluency is quite wide. At what point, for example, do we consider that the number of repetitions constitutes a stutter? How many hesitations does someone have to make in order to be considered to have a stutter?

The answers to these sorts of questions are not easy to find. However, people displaying what is referred to as **normal dysfluency** demonstrate little frustration in producing speech, which characteristically contains several chance repetitions, prolongations and hesitations. The person will typically use appropriate non-verbal communication, such as making eye contact when both speaking and listening, and there will be no accompanying facial grimacing or other muscular tension in the vocal apparatus.

THE NATURE OF STUTTERING

We have seen how a degree of dysfluency is to be expected in all speakers. However, for some people, the nature and quantity of involuntary repetitions prolongations and hesitations can become excessive to the point of disrupting their communication. It is when the speaker recognizes that these factors are severely interfering with his or her communication that the speaker is considered to have a stutter.

Two broad types of stuttering are recognized: (1) primary stuttering, and (2) secondary stuttering.

PRIMARY STUTTERING

People who present with a primary stutter use speech marked by easy rhythmical repetition and prolongation of sounds, syllables or words. This describes the condition in a young child prior to being aware of their speech. There is no anxiety associated with this stage. Awareness of speech is related to age and cognitive development and, therefore, children at this stage are usually between 4;00-6;00 years of age.

SECONDARY STUTTERING

Persons who exhibit a secondary stutter use speech characterized by tense, uncontrollable repetitions, prolongations and hesitations.

In addition, a fourth symptom of stuttering is often present in their speech. This is known as blocking.

BLOCKING

Blocking is not usually present in normal dysfluency and, as such, it is a principal indicator of stuttering. Blocking typically occurs when two articulators come together with excessive force, e.g. when the two lips come together to form the sound 'b'. Rather than parting the two articulators rapidly and easily, the speaker is unable to release the contact between them and a great deal of tension may build up. In severe cases a speaker may be unable to release a blocked sound for around 5-10 seconds.

As well as the characteristic involuntary hesitations, repetitions prolongations and blocks, people with secondary stutters often exhibit associated behaviors such as:

- facial tics
- grimacing
- avoiding eye contact
- covering the mouth with the hand
- sputtering (an intense blast of breath following a halt in the flow of speech)

Invariably, there is awareness of the negative disruptive effects of these features of their speech. Consequently, people with secondary stutters often develop **psychological difficulties**, especially anxiety about speaking to strangers and speaking in public.

As secondary stuttering is epitomized by awareness, children are usually older than the 4;00-6;00 years age range typical of people with a primary stutter. Adults will, therefore, typically exhibit secondary stuttering.

In summary, the major difference between primary and secondary stuttering is the speaker's awareness of the negative effect(s) on his or her speech.

REASONS FOR STUTTERING

Stuttering was recognized as long ago as the 4th Century BCE when the philosopher Aristotle regarded it as being caused by 'too thick a hard tongue.' Today we would reject his conclusion regarding the cause but we must acknowledge that stuttering is not a condition to which only modern peoples have been prone. However, there still remain no clear cut answers as to the cause of stuttering. Several suggestions have been put forward but no one proposal appears to provide a complete explanation. A few of these proposals are outlined below.

NEUROLOGICAL DEVELOPMENT

Parents of young children may remark that 'the brain is racing ahead of the mouth' or something similar. In part, this may apply to children between 2;00-4;00 years of age. The infant's ability to co-ordinate the movements of their lips, mouth and tongue in a flowing, smooth and easy manner is much less well developed than their mental ability to think of what they want to say. This rationale may go some way to explaining why more males than females stutter, as we know that the neurological development of males is slower than that of females. However, as children mature neurologically, and develop greater control over their oral musculature, the suggestion that mental ability outstrips motor skills no longer provides a satisfactory answer as to the cause of a persistent stutter after the age of about 6;00 years.

ADULT REACTION

We have noted that the essential difference between a primary stutter and a secondary stutter is the speaker's awareness of the negative impact of his or her involuntary repetitions, prolongations and hesitations on communication. Children who exhibit a primary stutter have no such awareness. However, some adults (parents, teachers, carers) of children with a primary stutter will be more alert to these disruptive features and may react negatively to the child's speech. They may focus attention on the disruptions by asking the child to, "Say it again," "Slow down and think!" and so on. Thus, believing that a child is developing a stutter may cause adults to respond negatively to a child's speech. This may then create anxiety in the child and aggravate any dysfluency.

Learning that their reactions may be exacerbating their child's stutter can lead to parents feeling guilty. However, there is really no need to feel this way. **PARENTS DO NOT CAUSE THE STUTTER.** There is also much that can be done to help young children who may be stuttering. We know that parents can have a tremendously positive effect on helping their child develop fluent speech.

A speech therapist's job is to help parents better understand stuttering so that they can respond differently to their child's dysfluency. It is not about judging people.

"You did then what you knew how to do. And when you knew better, you did better." – Maya Angelou

Typically a speech therapist will work with parents, and other adults who care for the child, to demonstrate new ways of interacting when their child is dysfluent and, thereby, minimize any potential negative effects.

TRAUMA

Many people who stutter find that the stutter becomes more severe under conditions of stress. Some traumatic experiences may create the psychological conditions that lead to the onset of stuttering. In some instances, the stutter may persist even when the effects of the initial trauma have been minimized.

PREDISPOSITION

We know that stuttering may run in families and it appears that some people are predisposed to stutter whereas others are not. Under certain conditions of stress such people may begin to stutter because they are predisposed to do so.

In summary, some researchers consider the cause of stuttering to be **psychological** whereas others ascribe an **organic basis**. However, at present, the true cause (if indeed there is only one cause) remains unknown.

THE ONSET OF STUTTERING

The onset of stuttering may be gradual or sudden. For most pre-school children the onset is gradual. It is also common for dysfluent people to have periods of fluency. The duration of these periods varies widely, ranging from mere minutes to weeks or months.

THE PREVALENCE OF STUTTERING

Stuttering is more common in males (approximately four males to every one female who stutters), twins and left-handed persons. About one percent of the population (USA/UK) will suffer from stuttering to an extent that it interferes with their communication.

THE ESTABLISHED STUTTER

We have noted that people with a secondary stutter typically exhibit awareness of the interruptions to the fluency of their speech owing to excessive repetitions, prolongations, blocks and hesitations. A severe stutter typically disrupts the total pattern of speech. Characteristically, there is a reduction in the total output, i.e. the person simply does not speak as much as might be expected for someone of their age, educational background, occupation, and so on. In rapid conversation the speech may be delivered with much more force and strain. Further, the speech will have a less well-defined rhythmical pattern than in typically fluent speech. In some cases the rate of speech can lead to **cluttering**, i.e. it becomes uncontrollably fast and this results in so-called **dysrhythmic** and **incoherent utterances**.

These formal features of stuttering are also frequently accompanied by other symptoms and behaviors. Some of these are described below.

PHYSICAL SYMPTOMS

Certain concomitant movements and physiological reactions may accompany severe stuttering. These may include some, or all, of the following: irregular breathing; increased pulse rate; aberrant motion of the tongue and jaw; movements of the trunk and limbs; facial tics, and blushing.

AVOIDANCE BEHAVIOUR

People who stutter may develop the capacity to foresee a problematic word before reaching it and, therefore, they may become anxious. This is known as **anticipation**. As a consequence, they may avoid saying certain words on which they have stuttered before. In an attempt to overcome this, the person may devise **synonyms**. For example, a person may know that they are likely to block when saying the word *forest* and so they call it a *wood* instead. This is known as **substitution** and it tends to work quite well in general conversation. However, when more precision is required (e.g. discussing *asbestos*) there may not be a synonym available. This leads to imprecise speech and the person with a severe stutter tends to talk around the subject without ever naming it, e.g. *the insulation material...its hard...dangerous...* This talking around a subject is known as **circumlocution**. The

realization that they are being imprecise and vague may create additional psychological pressure that causes the person to stutter more.

As well as devising synonyms, people with a severe stutter may **withdraw** from saying certain things because of the fear that they may stutter. For example, a person may begin to ask, *where are you go...go...go..?* and because they start to stutter they withdraw with, *oh, forget it!*

People with a severe stutter may also avoid certain speaking situations that they find difficult, e.g. giving a verbal presentation at work; asking for directions at a train station. Alternatively, the person may devise strategies so as not to face the situation directly, e.g. rather than phoning a shop for the price of its products the person writes a letter instead.

POSTPONEMENT

This is similar to avoiding feared situations except that, in this case, the person who stutters continuously puts off doing something because they are fearful that they will stutter if they do it. For example, the person's spouse may ask him or her to "Phone Graham and ask him if he wants to come for tea this afternoon." The person who stutters may respond with *oh, I'll call him tomorrow*. This **deferment** goes on and on because they do not want to use the phone since they are afraid that they will stutter if they do so.

WHAT CAN BE DONE TO HELP?

Assistance and advice is available for any degree of stuttering, no matter what the person's age.

A variety of interventions are available. However, they are not all suitable for everyone. The choice of approach will be influenced by such things as whether or not the stutter developed gradually or suddenly, the presenting features of the person's stutter, and so on.

Many so-called 'cures' are advertised – frequently offered by people who have overcome their own fluency difficulties. They may be delivered through individual or group courses. We would not wish to dismiss all the claims made about these treatments: several courses that we have investigated have much to commend them. However, qualified speech therapists who have undertaken the appropriate speech therapy education will be cautious about any claims of a universal cure. In fact, it is not considered possible to cure a stutter, in the accepted medical sense of the word (BSA, 2006). It is noteworthy that the word 'cure' never appears in the Royal College of Speech and Language Therapists' *Clinical Guidelines* (RCSLT, 2005). With respect to stuttering the College notes that, "Some clients retain a life-long vulnerability to fluency disruption and so may require repeated episodes of care at different stages in their lives" (RCSLT, 2005:74).

Consequently, if you or anyone you know requires assistance for stuttering, **WE STRONGLY RECOMMEND THAT YOU CONSULT A QUALIFIED SPEECH THERAPIST.**



References

- BSA (2006) *Is There a Cure for Stammering?* British Stammering Association [WWW] <http://www.stammering.org/cure.html> Accessed 15.08.2010.
- RCSLT (2005) *Clinical Guidelines* (Royal College of Speech and Language Therapists) Bicester: Speechmark Publishing Ltd.