

Stuttering: When Attempted Solutions Become the Problem

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How is it that people who stutter develop body movements, look away during stutters, change words, avoid talking, and other maladaptive behaviors? What motivates them to make these choices? These begin as attempted solutions but become habitual and develop into real problems and secondary symptoms. How can we help them eliminate these behaviors?

Hank, a 4 ½ year-old boy, entered my lobby making a loud "huh" sound as he exhaled with great force and drama. He was also saying "mmm" very loudly and making his pitch increase. His eyes would look up to his right side and strain during these speech blocks. After closer examination it was evident that Hank made the "huh" sound just before any word beginning with a vowel and the "mmm" sound just before any word starting with a consonant. Anticipating a speech block as his larynx tightened, Hank used the "huh" or "mmm" as an attempted solution to prevent or escape the stutter.

Many preschoolers have developed what are called escape behaviors. In trying to escape the moment of stuttering and the physical tightening the child may blink his eyes, tap his foot, nod his head down, or similar signs of tension and struggle.

Preschoolers are quite capable of remembering problem words and avoiding them. One 4 year-old I evaluated had abandoned the word "I" six months before I met him. He was using his first name or "he" when referring to self. His parents described months of chronic and severe blocking on "I" preceding his choice to eliminate the pronoun from his vocabulary. When "he" became hard, the boy interjected "says" several times before "he." When you think about it, this avoidance requires a great deal of concentration and pre-planning of words. His attempted solution became the problem.

Numerous speech games that involved saying "I" got rid of the problem and unleashed consistent fluency.

Adolescents, teens, and adults who stutter often have a long list of tricks designed to prevent stuttering. One adult with the fear of asking for people and saying his own name on the phone had gathered his friend's cell phone numbers. That way he could connect directly with people and avoid what he feared. This attempted solution only made the fear of asking for people and saying his own name grow in intensity. A software engineer in a large four story office would email or walk to his co-workers offices. He would never call them when they were at their desks. If he had to call, he would leave voice mails during lunch or after hours. He had learned which code to key in to re-record the messages until he was satisfied. He rationalized his avoidance tricks by thinking his peers would perceive him as devoted or a workaholic when they noticed lunch and evening messages.

"Freedom is to speak. And, I fear to form what is air (speech) and may be made in a minute (a stutter.). Michael McClure

Fight or Flight

What is it about the experience of stuttering that people who stutter are so motivated to prevent and conceal stuttering? Preschoolers feel the physical struggle of a stutter, their vocal cords adduct and tighten, and fight against it by pushing (blocking) or avoid and

give up. Being in Piaget's Preoperational Stage of cognitive development (age 2-7), they do not remember stutters as traumatic and do not personalize stuttering like the child age seven and older. How then must it feel inside to stutter that a preschooler may start changing words, use character voices, insert "uh um" just before a speech block, or verbalize frustration to their parents?

According to Guitar (1998), the Borderline Stutterer has mostly loose and relaxed disfluencies and rarely reacts to them. The Beginning Stutterer has more tension and hurry in the stuttering. Further, the Beginning Stutterer is aware of his difficulty and frustrated but does not yet have strong feelings about self as speaker (identity). The Intermediate Stutterer- typically between the ages of 6 and 13- is starting to fear and avoid stuttering. His classifications of stuttering development and severity take into effect physical/behavioral symptoms (i.e., tension in the moments of stuttering) as well as the cognitive and affective issues related to stuttering.

Once a child develops the identity of a stutterer she will often go into a defensive mode and try to conceal it. Embarrassment and listeners reaction usually motivate this covert operation of hiding stuttering. People who stutter demonstrate a higher level of cognitive anxiety than normally fluent speakers (DiLollo, et al 2003).

The Fight or Flight response is our body's primitive, automatic, inborn response that prepares the body to "fight" or "flee" from perceived attack, threat, or harm to our survival. Originally discovered by Harvard University physiologist Walter Cannon, this response is hard-wired into our brains and represents a genetic wisdom designed to protect us from bodily harm. This response actually corresponds to an area of our brain called the hypothalamus, which- when stimulated- initiates a sequence of nerve cell firing and chemical release that prepares our body for running or fighting. When we experience the Fight or Flight we feel a sensation of panic in our soma (body) as adrenaline, noradrenaline, and cortisol are released into our bloodstream. The panicky sensations just before a stutter are similar to the Fight or Flight response. When one understands and appreciates the intensity of this panic sensation in people who stutter he can then grasp how elaborate avoidance strategies are common.

When our actual physical survival is threatened, there is no better response than to have the Fight or Flight. Unfortunately, we can assign a meaning of threat to a behavior called stuttering and experience the Fight or Flight response when stuttering or blocking is anticipated. The young child can strongly dislike the experience of being unable to speak. The adolescent, teen, and adults can remember painful moments of stuttering on time-line and perceive threat (i.e., embarrassment, shame, teasing, bombing a job interview, rejection from an attractive person, and so on) and fire off the Fight or Flight. This phenomenon of remembering stuttered events and fearing future ones has led to stuttering being called a variant of Post Traumatic Stress Disorder (Starkweather, 2003).

"Stuttering is everything we do trying to not stutter." Wendell Johnson

Attempted Solutions

A text book would be required to list all the attempted solutions tried by people who stutter. Here is a list of some of the most popular forms of Fight or Flight:

- **Movement of the extremities:** arms, hand tapping, finger fidgeting, and foot tapping (or stomping). Unfortunately, some of these are taught by well-meaning parents and professionals. During the moment of blocking and tension the movements are not subtle and rhythmic as intended. For example, a first grader who chronically blocked on words starting with /s/ was taught to put his hands in front of him and pretend he was pulling on a rubber band before starting the word. As he experienced a speech block, his eyes rolled back in his head and his arms jerked bringing more attention to his stuttering and not helping him ease into the word. The attempted solution created a

glaring secondary symptom. I showed him pictures of items beginning with /s/, had him rest his hands on his lap, notice the feeling of anticipation in his chest and throat, exhale slightly, and say the word. Then I asked him do you need or want your hands to say /s/ words? He said NO and we solved this problem.

- **Head movements:** I separated this from extremities because of all the directions the neck and head can go. I have seen people who stutter nod their head as they force out a word, roll their head up and back, or jerk it to the side. This attempted solution- which brings great attention from listeners- is to force the word out.

- **Eye contact aversion:** this is the purposeful breaking of eye contact just before and during stutters. I have seen it in self-conscious preschoolers and see it in nearly all teens and adults when I first meet them. After interviewing several hundred people who stutter and avert eye contact, the positive intention (attempted solution) is to not see the listener reaction during the stutter. These people remember listener reactions that they found unpleasant – sometimes teasing- and want to prevent seeing anything that resembles those moments. However, when the person who stutters is feeling self-conscious and nervous, the stutter intensifies in a physical sense and the cognitive and affective issues are reinforced (Mackesey, 2002). Listeners still see the stuttering and actually become uncomfortable since the person stuttering is looking away from them. I have interviewed several people who don't stutter and they reported starting to look away because they felt the person stuttering and averting eye contact wanted them to!

- **Escape behaviors:** as mentioned earlier, these can include something subtle as eye blinks, but also include movement of extremities. The person stuttering is trying to escape the shackles of the speech blockage.

- **Deep breaths:** before I explain this one I want you to try an exercise. Put your hand on your chest and count out loud to three without taking a breath first. That's right, just let your chest gently fall as the air and words come out. Once you've mastered that, count to five. Then I want you to rest and go to ten. This is very easy- not rocket science. After going to ten, you have proven the ability to say ten words without taking a breath!

Many people who stutter take a deep breath immediately before they manifest the speech block. Some were taught to do it. Unfortunately, when anxious the breath is high in the chest and not from the diaphragm. So, they feel a stutter coming and take a quick and deep inhalation with the positive intention of thrusting the word out without a stutter. But again, the attempted solution becomes the problem. The extra air and force in a moment of panic about a stutter is like pouring gasoline on a fire.

I help people "block the blocks." This means they learn to feel the stutter, stop, relax, and begin the word as they gently exhale. Remember, they have all the air they need for a word, phrase, or short sentence residing in their chest- it's called residual capacity (Nicolosi, 1989).

It is understandable that the lay person observing blocking and apparent running out of air might say "take a deep breath." Scientists have discovered that the diaphragm and chest tighten during the Fight or Flight.

Not only is it unnecessary to take a deep breath, it is not suggested when the anatomy of the torso and larynx constricted and feeling like a panic attack.

- **Interjections and starters:** In normally fluent speech there are "thinking um's." In stuttered speech, you will hear sounds, words, and phrases inserted with the purpose of preventing stutters. Specifically, when the person feels a stutter coming they insert unnecessary junk attempting to delay or avoid blocking. This can habituate and become

a very obvious and distracting symptom of stuttering. One adult I met trained himself to say "well basically" or "honestly" up to eight times preceding a stuttered word. Another closed his eyes and said "um" 58 times before attempting his name. Since this reinforces fight and flight it is really stuttering; it is blocking to not block. For a person to learn to manage the moment of stuttering he must remove interjections and starters. When motivation, behaviors, and choices are designed around attempting to conceal stuttering, the results will always be a problem.

- **Word Changing:** Another attempted solution becoming a problem is word substitution. People who stutter can store in memory a number of words that they fear stuttering on. When I moved from Wisconsin to Atlanta with a real stuttering problem I would answer "up north" to inquiries of my home state. This only exacerbated the fear of stuttering. If you want to be on the swim team, you have to get in the pool, right? If you want to eliminate the fear factor on any given sound or word, you have to take it on and say it. Many have reported ordering a food item based on what they feel they can say without stuttering instead of their desired food item. This is sad indeed. Some have shortened wedding vows to eliminate "feared words."

I once met a man who bought a company that was named after a word he had never said before in his life. He began stuttering on the name of his new company. Then he started circumlocuting, which means talking around the word (i.e., "um it is like in the media industry.") After several experiences of blocking when cold calling to sell his service he started requesting his secretary to call and ask for people and then patch him through on the phone at his desk. Asking others to speak for us is enabling the problem. Do you see how he developed a full-blown phobia in a matter of two months?

- **Avoiding all together:** this category includes all the people who stutter who don't raise their hand in class, don't approach and introduce themselves, hang up when voice mail comes on, decline a role in a play, settle for jobs with less speaking, don't call for a date, decline invitations to social activities where speaking to a stranger will happen, and a myriad of other avoidance strategies. The attempted solution in avoiding is to conceal, prevent, and/or not experience stuttering. The term social anxiety is often used in describing the phobia-like experience in stuttering.

- **Phone tricks:** along with public speaking, telephoning is one of the most common phobias of people who stutter. Even with the invention of the internet, the phone and verbal communication is not going away. I feel that the phone is a life skill! Being able to call "911," call for doctor appointments, call to set up job interviews, and the like are critical.

I recently met a 40 year-old professional who reported re-recording voice mails up to 20 times in pursuit of a fluent message. When asked his criteria for a success, he responded: "One with just a small stutter." He laughed when I asked if he times the stutters with a stop watch or uses biofeedback to measure acoustics and sound. The real issue was his toxic belief: "If someone hears me stutter, they will think I am not competent." He admitted imagining that people would play the message and scoff...or even share it with others. These self-made mental movies full of mind-reading (Burns,) drove his phobia.

- **Enabling:** this problem disguised as a solution summarizes all the ways that well-meaning family members, teachers, and friends make the problem worse. When a parent and teacher make special arrangements that excuse a child from speaking in class, do you think that reduces future fear? No, this type of enabling ensures future fear in similar situations and also plants a limiting belief that sounds like this "Because of my stuttering, I can't talk like the other kids....I need preferential treatment."

I once helped a college freshman who had dropped four out of five of his first semester classes. Why you ask? After finding out that oral participation was required he panicked

and dropped 80% of his classes. Looking back to his high school experience, he had been allowed to deliver oral presentations on video for only the teacher to see and was excused from oral reading. Of course his peers were never educated about his stuttering problem but perceived him to be exempt from responsibilities and expectations thrust upon them. He got some teasing and disparaging remarks about it from time to time. I am not saying that faculty should have announced his preferential treatment. I am saying he should have been coached and supported to make all the talks in front of his class. The phobia that was enabled blew up in college.

- Character voices: several years ago I thought that comedian/actor Jim Carey had been cloned. I had a number of young boys imitating his voice and mannerisms. They had discovered that they could sound more fluent and make people laugh. This attempted solution becoming a problem had extra appeal- laughter and approval.

Many preschoolers have discovered that whispering and character voice can seem to eradicate stuttering. Since avoidance of stuttering is simmering under the surface, the tricks usually last for only a short time before a new one is needed.

Some with severe and chronic stutters have reported being shocked after experiencing fluency in a school play or theater performance. Stepping into a different character role, one that doesn't identify himself as a stutterer, can sometimes manifest startling fluency. It is not recommended to speak in character voices to conceal stuttering. This attempted Jekyll and Hyde existence is not healthy. It does raise questions about how a person- when not thinking about stuttering and rather focusing on a character role- can remove stuttering from his speech.

Real Solutions

In the Deep South there is an expression: "if you always do what you've always done, you'll always get what you always got." The definition of insanity is to continue doing the same thing over and over again but expecting different results. Trying to not stutter- with all of its physical symptoms of struggle and avoidance tricks- is a recipe for insanity. I did it for more than 20 years.

Parents and speech-language pathologists (SLPs) have to intervene and assist young children as they abandon Fight and Flight. Again, this is the best time to resolve stuttering since children have not developed stable memory and do not personalize stuttering and label themselves as older children do. The leading-edge direct model I developed to stop stuttering in preschoolers is called F.A.S.T. Fluency, an acronym for Family And SLP Treatment for Fluency. See www.stuttering-specialist.com

After age seven there are usually cognitive and affective issues that compound the physical symptoms of stuttering. SLPs have referred to this as the "ABCs of Stuttering": Affect, Behaviors, and Cognitions. I have found cognitive psychology strategies from Neuro Linguistic Programming (NLP) to offer a modality for removing anxiety and fear. For example, NLP offers therapeutic strategies for "editing" memories of past stuttering events (Bodenhamer & Hall, 1999). This is not brainwashing, rather it is changing the meaning the person assigned to the event. One 13 year-old said: "I stuttered when I gave my oral presentation at school....all the kids thought I was stupid." This presuming to know what others think is called mindreading. Being convinced that others will think we are stupid if we stutter, could be just the cognitive distortion (Burns, 1989) motivating avoiding and word changing- flight.

By taking the hurt out of old moments of stuttering, anxiety in the present and predictions of future problems are reduced until eliminated. So, when you think about it, NLP and cognitive psychology may be the solution for the PTSD and stuttering comparison. If you remove anxiety from people who stutter, will they continue to attempt solutions like word changing, phone avoidance, point to menus instead of

speaking, avoiding drive-thru-windows, and all the other maladaptive choices? The answer is NO. I have found that is possible to eliminate avoidance and other behaviors by integrating cognitive psychology into traditional speech pathology.

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