## Reply #2 - to u/csdiuagrad

"Adults who stutter (AWS) instead define stuttering as an internal feeling or awareness of being 'stuck' that is surrounded by cognitive, affective, and action-related responses to stuttering. The current study is an exploration of stuttering informed by phenomenological analysis and a psychological construct known as interoceptive (i.e., internal) awareness."

In response to what you said, I will provide my own opinion:

This research is really important for us people who stutter. I think it's even more important than many other stutter research - to make progress in stuttering!

It's not just the "distal causes" (such as, predispositions, and risk factors). Distal causes also include beliefs. And "proximal causes", the events that occur immediately prior to a moment of stuttering. All factors are important, but I think that especially the factors are relevant for treatment that are not considered predispositions and risk factors. Examples of those factors include: anticipatory anxiety, speaking demands, linguistic complexity, mood affect, energy level, and cognitive functioning. They likely increase the chance to trigger our approach-avoidance conflict and stuttering.

Speech therapy generally focuses on acceptance, and desensitization - which often improves our approach-avoidance conflict (despite genetic/neurological factors etc). So I'd say, this likely means that acceptance and desensitization affects the stutter mechanism that malfunctions thru conditioning by waiting for (what we believe to be) all the necessary conditions for fluent speech to be fulfilled, because of a failure of its fine-tuning. (as if speech execution is a problem to be avoided during certain subconscious stimuli). Such that, cognitive appraisal weighs the potential benefits of speech execution against its potential risks or costs and then allows or prevents the release of words based on how they are evaluated (which is a mechanism that is hard-wired /innate in all humans, it's not learned). Acceptance or desensitization changes how we evaluate subconscious stimuli, and so, it can loosen the mechnanism or adequately fine-tune it so that speech execution - to make it more socially appropriate and which varies according our needs becomes adaptive when we do not want to speak, and also adaptive when we want to speak. Essentially, it's a form of forward modelling whereby the speaker draws on past experiences to calculate the probable impact of cues associated with past instances of stuttering on their current ability to utter a specific word in a specific speaking situation. In other words, a normal regulatory mechanism for speech execution breaks down due to being pushed beyond its normal limits.

## Conditioning process:

(1) Our subconscious associates cues with past experiences of communication failure leading to a malfunctioning of the mechanism for speech plan execution.

(2) Our subconscious learns to anticipate the situations in which the mechanism will malfunction (process of forward modeling)

Resulting in the speaker arriving at the perception:

I need to do something **better** (or more perfectly, clearly, accurately etc) to move the speech muscles (than I'm doing at this moment of trying to speak) (whether out of fear of social rejection due to poor performance, or simply a maladaptive defense mechanism in order for them to control their speech movements better)

I need to control the automatic processes (rather than letting them go)

I believe I can detect when my stutter mechanism becomes breaks down by focusing on specific thoughts or emotions. Poorly fine-tuning this stutter mechanism - in this way - is positive (i.e., good) because it makes speech execution easier.

Vicious cycle:

Satiation: After repeated unsuccessful attempts resulting in negative experiences, their drive decreases to properly fine-tune their stutter mechanism (reward deprivation).

Stutterers do not stutter all of the time. The majority of words and phrases spoken by the majority of stutterers appear, perceptually at least, to be as fluent as those produced by normally-fluent speakers. The question remains: What governs or decides this distinction?

My answer: My 2 cents would be this amazing research that investigates our interoceptive (i.e., internal) awareness of being stuck that is surrounded by cognitive, affective, and action-related responses to stuttering.

So I believe that stutterers really want to participate to help make progress towards stuttering.