The ABCs (Affective, Behavioral, Cognitive) Aspects of Evaluating and Treating Chronic Stuttering

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IMPORTANT: Before the convention

- We do not plan on going over this handout item-by-item at the MSHA convention roundtables.
- Please review the information in this handout before the convention and jot down any questions or points of discussion. Bring a copy of the handout to the roundtable.
- The roundtable is meant as a forum to discuss your questions or comments about addressing the affective, behavioral and cognitive aspects of stuttering treatment.

The evidence is mounting....

- ...that stuttering appears to be genetically transmitted
- ...that there are functional, and probably anatomical and chemical differences in the brains of PWS compared to people who don’t.
- ...that these differences involve both hemispheres of the brain in speech processing.
- What does this mean for PWS? Does it make a difference knowing it’s physical?
Goal: Full Participation

International Classification of Functioning, Disability and Health (WHO, 2002)
- Tool for measuring functioning in society, no matter what the impairments
- Model of disability: “biopsychosocial” model (synthesis of biological, individual and social perspectives)
- What is level of functioning?
- What treatments can maximize functioning?
- Reduce or remove limitations to activities and restrictions to participation in widest array of environments possible

ASHA’s Scope of Practice
(as related to WHO classification)
- Contextual (environmental and personal) factors interact with each other and with the health conditions and may serve as facilitators or barriers to functioning.
- Speech-language pathologists may influence contextual factors through education and advocacy efforts........
- Speech-language pathologists work to improve quality of life by reducing impairments of body functions and structures, activity limitations, participation restrictions, and barriers created by contextual factors.

Current Focus On Attitudes And Emotions
(Or...What goes around, comes around...maybe we should have paid closer attention in the first place......)
- Bryngelson: Bring the problem out into the open and be willing to stutter
- Johnson: Fear was heart of problem: stuttering was an avoidance reaction caused by fear of anticipated speech interruption.
- Van Riper (1990): Treatment is more than eliminating stuttering.
  “The goal of therapy for the confirmed stutterer should not be a reduction in the number of dysfluencies or zero stuttering. Fluency-enhancing procedures can easily result in stutter-free speech temporarily but maintaining it is almost impossible”
Importance of addressing attitudes and emotions

- Why deal with feelings?
  - feelings affect behavior
  - feelings motivate and resist change
  - need to address fear and shame
- Anxiety does not cause stuttering, but it sure doesn’t help any………
  - Iceberg analogy (Joe Sheehan)
  - Role of the “fight or flight” response
- “I can’t use my techniques when my brain goes white.”
- Why do we blame clients when they can’t maintain fluent speech?

Importance of limbic system in stuttering

- Limbic system is the "launching point" of emotions.
- Limbic system is the "emotional connector" to the cognitive, prefrontal cortex.
- The limbic system is closely connected to the system for movement.
- Parts of the limbic system (amygdala and hippocampus) are intimately involved in storing long-term memories.

What happens when "threatened?"

- Fight or flight is first response
- Stress hormones are activated before information is passed to frontal lobes, which moderates autonomic responses after they happen
- Frontal lobe—controls serotonin (happy neurotransmitter) release—tells amygdala there’s no threat, and fight or flight response dies down—allows you to “think” about what’s happening
  - Our “wise brain” is our friend.
  - Our frontal lobe helps us be “mindful” of our surroundings and our own reactions.
Threat (continued)

- If threat is still perceived, additional stress hormones and body systems come into play.
- Fear can beget fear — runaway feedback loop.
- Amygdala is connected to hippocampus (fear is put into long-term memory).
- Once we learn to fear something, our brains are programmed to react in the same way the next time we encounter a similar situation—hard to get rid of fears.
- Humans are thinkers... we can activate this response just by thinking about the threatening situation.

The iceberg analogy
(Thanks to Russ Hicks and the Stuttering Homepage)

Assessments That Address Attitudes And Emotions

- Overall Assessment of the Speaker's Experience of Stuttering (OASES™)
  - Ages 7-12
  - Ages 13-17
  - Ages 18+
- A-19 Scale  www.fluencyfriday.org/A19scale2.pdf
- Erickson S24 Scale www.eku.edu/fluency/pdfs/erickson.pdf
- Behavior Assessment Battery Communication Attitude Test (CAT)
  www.pluralpublishing.com/publication_babcat.htm
Treatment Activities To Address Attitudes And Emotions (from Erin Bodner, M.A., CCC-SLP)

- Education about speech production and stuttering
  - Knowledge is power
  - Taking ownership
  - Educating others
- Advertising/self-disclosure
  - Normalize stuttering
  - Remove the stigma
- Desensitization
  - Gives power back to the client
  - Voluntary stuttering
- Overcoming avoidance
  - "Feel the fear and do it anyway."
  - Approach, rather than avoid
- Cognitive restructuring
  - Cognitive Behavior Therapy
  - Mindfulness training

Cognitive Behavior Therapy

- CBT is a form of psychotherapy developed in the ‘60s by Aaron Beck
- Emphasizes role of thoughts, assumptions, and core beliefs to explain how people feel and act
  - Evaluate listeners’ reactions realistically
  - Use knowledge of stuttering/talking to make different choices
- Thoughts, feelings, physiological responses and behaviors are intertwined.
- Are ways of coping helpful or counterproductive? How can change happen?

Cognitive Behavior Therapy model

What I think (worry thoughts)
What I do (actions)  How I feel (emotions)
What happens in my body? (physiological reactions)
What I think (worry thoughts)

• Don't vomit
• Don't stutter, don't block
• Please don't call on me.
• I wonder if I'm gonna stutter a lot
• I think I'm probably going to stutter
• I think I'm going to get stuck on a word.
• They're probably going to be mean or not be my friends.
• I'm scared I'm gonna get stuck on a word.
• I think I'm going to be scared and stuck on a word.
• They'll laugh at me.

What I think (helpful thoughts)

• Take a deep breath and relax (+)
• I should slow down (+)
• Calm down when I stutter (+)

How I feel (emotions)

• Nervous
• Sad
• Frustrated
• Mad
• Stressed
• Scared
• Shy
• Embarrassed
• Upset
• Shame
• Guilt
What happens in my body:
- Feel like I will vomit
- Shaky
- Dizzy
- Upset stomach
- Queasy
- Muscles tighten (chest, neck, stomach)
- Tighten up
- Hard to breathe
- Sweat
- Hard to get a word out
- Eyes get tight/heavy
- Arms get stiff
- Head hurts
- Heart beats faster

What I do (actions):
- Rock back and forth
- Take deep breaths
- Close eyes
- Think of an excuse to get out of it
- Jump around to get the energy out
- Stop talking
- Switch words
- Eye contact is hard
- Push it out
- My leg shakes

What I do (positive actions):
- Talk slower (+)
- I do what I need to do, talk (+)
- Stutter (+)
- Try and calm down (+)
- Sit down and relax (+)
- Take a breath (+)
- Use the speech tools I learned (+)
- Talk smoother (+)
- Try to slide out my words (+)
- Stutter on purpose to make it less scary (+)
**Mindfulness**  
From M.P. Boyle (2011) article

- Definition: “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (Kabat-Zinn, 1994).
- Observation of inner and outer experiences
- Acting with awareness
- Acceptance of internal and external phenomena (not judging negative emotions)

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**Mindfulness**  
From M.P. Boyle (2011) article

- Acceptance of events typically perceived as negative can help increase coping strategies
- Improved emotional regulation
- Observing thoughts as “just thoughts” rather than truths
- Increased physical sensations of speech production
- Improved attentional control
- Focused attention on something specific (e.g., breath) or open monitoring (alert observation to anything, such as thoughts, feelings, sensations)
- Greater acceptance through less avoidance and suppression of negative thoughts

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**Expectations For Successful Treatment**

- Is it realistic to expect to “cure” stuttering? Then why do we beat up ourselves (and sometimes our clients) when we don’t?
- The rule on relapse: expect it. Need to assist clients with strategies to manage it.
- Reduction in frequency of stuttering (measured in % fluent syllables or words)—could actually increase if they have been avoiding
- Reduction in severity of stuttering (harder to measure the degree of “struggle”)

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Expectations For Successful Treatment (continued)

- When taking data, moments of stuttering without force or struggle are counted as “correct.”
- Improvement in the attitudinal and emotional reactions (have to rely on clients’ assessment)
- Improvement in quality of life.
- Feedback from others in the environment
- Improvement in overall communication

How does having the “big picture” impact our therapy goals?

- Consider these examples……..

Affective/Emotional goals:

- Student will report entering into previously avoided speaking situation 3x
- Student will use pseudostutter in 3 different speaking situations
- Student will state 3 statements to counter bullying or teasing about stuttering
- Student will demonstrate increased positive attitudes as measured by OASES
Behavioral goals (speech motor aspects, but think skill sets rather than only % fluency)

- Client will demonstrate ability to ease in and ease out of 80% feigned or actual stutters in tx room
- Client will demonstrate appropriate rate during oral reading passages from text on 80% opportunities
- Client will demonstrate ability to change tense stuttered words (feigned) within self-generated sentences to relaxed productions on 80% opportunities
- Client will use cancellation strategy 1x per session over 3 sessions when speaking to peer

Cognitive goals (what the PWS knows & thinks about stuttering)

- Client will explain speech mechanism including 5 key components following instruction
- Client will create informational presentation (speech brochure) including at least 5 key facts about stuttering
- Client will complete 2 cognitive-behavioral cycles and identify thoughts, feelings and behaviors associated with stuttering within 2 different speaking situations with SLP assist
- Client will set up and complete experiment evaluating his thoughts for one speaking situation above, with SLP assist and will provide a positive response to counter negative thoughts.

Some quotes from adults who stutter

- Let go of that perfect image of who you think you should be.
- Avoidance becomes who you are—-or who you are not.
- We don’t have a choice whether we stutter. We do have a choice of how we stutter.
- Visualize success.
More quotes

• Avoidances in speech, turn into avoidances in life.
• I have to mentally prepare myself for moving forward.
• Courage is not the absence of fear; it is being able to persevere in the face of fear.
• Stuttering is not who you are; it is simply one thing you do.

More quotes

• In order for me to progress in my stuttering, I had to stutter.
• I see a way out. Before I just felt despair.
• I think I’m in the process of changing my mind—I make the problem by thinking.
• Become your own problem-solver.

More quotes

• I have to come to terms with the words I’m attached to (mental list of words to avoid).
• I’m so focused on negativity with my speech, that it’s time I explore the positive.
• I’m trying to push my comfort bubble out, so I don’t hit fight or flight so frequently.
• Stutter with confidence.
• Stutter in good form.
### More quotes

- Don't hitch your self-esteem to the fluency star---you are bound to be disappointed.

- I was that kid that didn't want to speak in class and tried to avoid certain situations. But then, once I just accepted it [stuttering], it actually changed my outlook on pretty much everything and made me a lot happier with myself... Embrace it and don't let it prevent you from doing the things that you want to do in life.
  — George Springer, outfielder, Houston Astros, *StutterTalk Episode 453*