Assessment of Fluency

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Spotlight on Stuttering

WISCONSIN DEPARTMENT OF
Public Instruction
JILL K. Underly, PhD, State Superintendent

New Rule Effective August 1, 2021

Individualized Education Program (IEP) teams must use the new criteria to identify a speech or language impairment for referrals for special education dated on or after August 01, 2021.

- **Summary of Changes for SLI Rule**
- **Revisions to SLI Identification**
- **Videos of SLI Criteria Overview**
- **September 15 SLI Criteria: Digging Deeper Webinar 3:30-5:00 Registration Link**

Comprehensive Assessment Model

4 Part Model for Comprehensive Assessment	
Academic Activities: • Artifact analysis • Curriculum-based assessment • Observations in school (natural) settings • Educational records	**Speech-Language Probes:** • Case history • Interviews • Language/Narrative samples • Stimulability • Dynamic assessment • Play-based assessment
Contextualized Tests: • Norm-referenced measures of academic achievement • Curriculum benchmarks	**Decontextualized Tests:** • Norm-referenced speech-language tests (parsed skills: articulation, semantics, syntax, morphology, fluency, etc.)

Ireland, Marie. "The Real Requirements Behind Eligibility Decision Making in Schools". Lecture. ASHA Connect, Chicago, IL. July 19, 2019.

Planning Assessment

"No single measure or assessment is used as the sole criterion"

IDEA 34 CFR §300.304 (b)(2)

What is an Evaluation for Special Education?

"Evaluation means procedures used . . . to determine whether a child has a disability and the nature and extent of the special education and related services that the child needs."

34 CFR 300.15

Limitations of Norm-Referenced Tests

*Decontextualized tests are just one-fourth of the model

Norm-referenced tests:
- Vary in their accuracy
- Assumes all children have had the same experiences and opportunities
- Skills assessed are associated with culture or socioeconomic status, such as vocabulary, rather than a true language impairment.

Cate Crowley, Leader's Project, Columbia University
https://www.leadersproject.org/2012/11/26/applyi ng-dynamic-assessment/

Current Research

- Over-reliance on formal assessments in identification of speech-language impairments.
  (Fulcher-Rood, Castilla-Earls, & Higginbotham 2018; Ireland & Conrad 2016)

- Test selection is often not dependent on student need or psychometric properties of the test.
  (Merrell & Plante 1997; Betz, Eickhoff, & Sullivan 2013; Fulcher-Rood, Castilla-Earls, & Higginbotham 2020)

Considerations for Students Who Are English Learners

- Assess the child in both languages unless it is not feasible to do so.
- Recommendation to use a translator to obtain case history to determine extent of knowledge and use of home language.
- Interview school staff (gen ed teacher; EL teacher) regarding language use across settings.

Orellana et al. 2019; Roseberry-McKibbin 2021

Educational Impact

Academic	Social and Emotional
-student oral participation in the classroom to include asking and answering questions, reading aloud, small group projects, oral presentations and etc. -running records, writing samples, districtwide assessments -spelling -reading-decoding skills, phonological awareness skills	-withdrawing from social situations, being teased, withdrawal from large and small group conversations -observations -interviews (including the student) -questionnaires

Purposes of Assessment

- To identify a specific condition not realized at the start.
- To differentiate possible subtypes.
- **To understand the full nature of the disorder and associated challenges so that appropriate treatment can be undertaken.**
- To determine eligibility for school-based services

Learning Objectives

1. Types of Disfluencies and definitions
2. Key Points & Background information to Know about Stuttering in order to understand the assessment components
3. Preschool vs school age vs adolescents - assessment variations
4. Components of a comprehensive assessment for fluency

Case Studies will be interspersed with the various testing formats

Categories of Disfluency

- Developmental Stuttering
- Cluttering
- Stuttering/Cluttering
- Atypical Disfluency
- Linguistic Disfluency
- Normal Disfluency

Normal Disfluency - General Rules

- Fewer than 4 repetition units (even 2 repetition units are rare).
- Rate of repetitions about 2x longer (slower) than children who stutter (CWS).
- Sound prolongations less than a second.
- Multisyllabic and phrase repetitions and revisions.
- Interjections.
- Less within-subject and between-subject variability.

Linguistic Disfluency

A child whose speech contains many repetitions, revisions and false starts or abandoned utterances above what is normal for their age (use language sample analysis), but who does not meet the definition of cluttering.

Language areas are the major contributing factor to the disfluencies - assess under language guidelines

Atypical Disfluency

- Word Final Disfluencies (want-t-t-t, lunch-unch-unch)
- Word Medial Blocks (op [block] en)
- Mid-syllable insertion or break (we-he)
- Word Final Prolongations (bus-------)
- Associated with Autism Spectrum Disorders, Obsessive-Compulsive Disorders and "Neurological Sensitivity"
- Subset of Stuttering or something different??????

Cluttering

"Cluttering is a fluency disorder wherein segments of conversation in the speaker's native language typically are perceived as too fast overall, too irregular, or both. The segments of rapid and/or irregular speech rate must further be accompanied by one or more of the following:

(a) excessive "normal" disfluencies;

(b) excessive collapsing or deletion of syllables; or

(c) abnormal pauses, syllable stress, or speech rhythm."

(St. Louis and Schulte 2011.)

Cluttering (cont.)

Also associated with the following: lack of awareness of the problem; family history of fluency disorders; poor handwriting; confusing, disorganized language or conversational skills; temporary improvement when asked to "slow down" or "pay attention" to speech; misarticulations; poor intelligibility; social or vocational problems; distractibility; hyperactivity; auditory perceptual difficulties; learning disabilities; and apraxia.*

*ASHA Leader, Vol. 8, Issue 21, November 2003, Kenneth St. Louis, et al.

https://www.youtube.com/watch?v=iGf4Z6XGCMI&t=152s

Developmental Stuttering

- Listener's definition - observable characteristics
  Repetitions (sound/syllable/one syllable word 2+ iterations at faster rate, prolongations>1 second, blocks of air, and secondary behaviors)
- How does a person who stutters (PWS) define their stuttering? ABC (**a**ffective, **b**ehavioral, **c**ognitive)

How Kids Define their own Stuttering

Not talking, eating lunch by yourself, never volunteering, whispering, annoying, always there, words caught in my throat, embarrassing, not talking, avoiding, pretending not to know, speeding up, holding back, being paranoid, wrong, burying myself in books, being stared at, sticky, can't say it.

Dr. Joseph Donaher

Joe's Definition of Stuttering

Dr. Joe Donaher's Definition of Stuttering (CHOP, Children's Hospital of Philadelphia)

Stuttering is a neurologically-based disorder which impairs an individual's ability to time and sequence the underlying movements necessary for speech. Stuttering is NOT a set of behaviors…

Over time this UNDERLYING IMPAIRMENT, results in:
- The characteristic speech behaviors (repetitions 2+, blocks, prolongations)
- Reduced confidence in communication
- Feeling of losing control for speaker
- Increased tension, struggle, and pushing
- Anticipation of future speech breakdowns/Avoidances

Key Points - Fluency Disorders (from manual)

Stuttering is a complex, multi-dimensional disorder that may persist through the school years and beyond. Suspected fluency disorders such as stuttering require a comprehensive assessment that uncovers the full range of the speech behaviors across environments and linguistic tasks. Additionally, contributing factors to the disfluency may change as a child develops and must be accounted for, including the following:
- language and articulation skills,
- temperament,
- attitudes or emotions, and
- coexisting diagnosis.

Key Point - Fluency Assessment

Stuttering is a complex, multi-dimensional disorder **that may persist through the school years and beyond.**
➔ **CWS at 4 years - 75-80% chance of recovery**
➔ **CWS at 6 years - 50% chance of recovery**
➔ **CWS at 10 years - 25% chance of recovery**

What does this mean for the assessment?
Cognitive shift from "working on the stuttering" to helping the school-age child reach their communication potentials. Our assessment will be modified for early childhood since they have the best chances for recovery (without intervention and with intervention).

Key Point - Fluency Assessment

Suspected fluency disorders such as stuttering require a comprehensive assessment that uncovers the **full range of the speech behaviors across environments, time and linguistic tasks.**

What does this mean for assessment?

Collect speech samples across environments such as home and school as well as different linguistic tasks such as single word answers, sentence repetition and formulation, conversation, narrative or expository.

Key Points: Fluency Assessment

Additionally, contributing factors to the disfluency may change as a child develops and must be accounted for, including the following: **language and articulation skills, temperament, attitudes or emotions, and coexisting diagnosis.**

What does this mean for assessment?
We need to collect a thorough case history, and do testing goes beyond speech samples to measurements such as rating scales for temperament, formal and informal articulation and language testing, along with formal and informal measures to uncover the thoughts/attitudes and emotions of the student and their family members.

Fluency Assessment Similarities

How is fluency similar to other communication disorders?
- Gather background information,
- Observe the child,
- Assess severity,
- Assess impact,
- Consider and assess other communication challenges,
- Uncover factors that may be contributing to that child's communication challenges.

Fluency Assessment Differences

Look for _variability_ across . . .
- Individuals who stutter - "if you meet one child who stutters you meet one child who stutters"
- Age groups (assessment will change as child grows)!
- Time and settings within the individual
- Linguistic tasks within the individual
- Other variables (number of people, etc.)

*Thus the assessment must uncover those contexts that are more or less challenging for the individual child.

The Special Case of Preschoolers!

- Assessment for Preschool has some important differences compared to fluency assessment for older children and adolescents.
- Look at risk factors for persistent stuttering to guide clinical decision making.

Which child will recover from stuttering?

- When is "wait and see" a good option for a (my) child?
- What should we be looking for or (parents, SLP) doing during any "wait and see" interval?
- When should a child be referred for an evaluation and possible treatment right away?

Basic Facts for Stuttering Onset

- About 95% of stuttering onsets occur between the ages of 2-4; during the time of rapid language development.
- Sudden onsets are not uncommon - about 40% of all onsets (1-3 days).
- CWS with earliest onsets (less than 3 years;5 months) REGARDLESS OF SEVERITY at onset, are more likely to recover.
- At onset, severity does not predict persistence of stuttering.
- Stuttering should decrease in severity over 6-12 months for children as an indicator of recovery.

Risk Factors for Persistent Stuttering

- **Family History of Stuttering (especially if relative continues to stutter)**
  - 65% chance of following familial pattern of recovery from stuttering.
  - 65% chance of following familial pattern of persistence in stuttering.
- **Onset after 3 years; 5 months**
- Gender bias towards males persisting
  - M-F Ratio from 2-5 years (2.3-1)
  - M-F Ratio in adolescence (4:1)
- **Stuttering longer than six month to a year**

Risk Factors Continued

- Phonological Impairment (up to 40% of CWS).
- Language differences (discrepancies, delays and advanced language).
- Co-occuring diagnosis: ADHD, OCD, Anxiety/Depression, Learning Disabilities.
- Presence and higher proportion of stutter-like disfluencies
- Sensitive temperament.
- Parent/caregiver negative reactions and child negative reactions.

Preschool Case Study Questions

1. You see a girl who just turned three at a child find event. She shows tons of stuttering when talking. Parents report no family history, onset within the last week, no other speech-language concerns, but they are worried about the severity.

Preschool Case Study Questions

2. You are doing an evaluation of a 4 year old boy and parents requested an evaluation. You only notice mild stuttering if at all. From the case history you know that there is a family history of stuttering (persisting), and he has been stuttering with cyclical severity for over a year. There are also concerns about speech sound production. Parents report a sensitive temperament with perfectionist tendencies. They have noticed that he is saying, "nevermind" or walking away when stuttering.

Suggestions for "Monitoring" Period

- Daily ratings (0=no stuttering; 2= very mild stuttering and 8=worst stuttering imaginable). Try to calibrate ratings with video of child's stuttering…
- Talk about dates to follow up IF stuttering is staying the same or increasing.
- SFA video online - "7 Tips for Talking with Your Child" https://www.stutteringhelp.org/7Tips
- Always reduce possible feelings of guilt.

If Decision is Proceeding with an Initial Evaluation…

- Look at Parent Ratings since initial contact
- If no ratings, ask parents to start ratings. Get speech sample from home that shows stuttering
- Thorough Case History - include risk factors in report.
- Classroom observation - interview teacher - teacher rating form
- Norm or criterion referenced assessments - Test of Childhood Stuttering or Stuttering Severity Index 4.
- Get information about language (formal and informal) as well as phonology and articulation.
- Get Information about temperament

Case Study - School Age

Referral from mother: "14 year old boy with some stuttering. He has not qualified for school therapy in the past. He has had limited private therapy. He is becoming more self-conscious about it. He is arguing more with his father about his speech."

Let's go through the components of a fluency assessment using this example. What are you already thinking?

Case History!!

- Consider sending a case history form PRIOR to the RED meeting.
- Can find samples online:
  https://www.mnsu.edu/comdis/isad8/papers/coleman8/childintake.pdf
- Consider asking "best hopes" questions - What are your best hopes from this assessment? What are your best hopes for your child's communication in five years?
- Section for older child to answer to involve student from the start asking about interests, readiness to work on speech, thoughts about assessment for fluency (i.e. "whose idea"?)

Case History (in Manual)

- Obtain case history from the family to determine the following :
  - the extent of the family's understanding of fluency disorders, including suspected causal factors, and how fluency disorders such as stuttering may be viewed in their culture
  - information about the child's onset of stuttering and how the stuttering may have changed over time
  - what they may be already doing to help their child with fluent verbal expression.
  - other speech, language, or learning concerns

Case History (in Manual)

- Obtain case history from the family to determine the following (continued):
  - medical information about the child which could be contributing factors to the fluency disorder
  - current stressors in the home environment which may be impacting the child's fluency such as a new sibling, recent move, or even a fast-paced living and talking environment
  - family history of stuttering
  - family observations regarding the current variability of stuttering across time and settings

Gather Information from Other Sources

- Previous testing and therapy from schools or elsewhere.
- Assessments for other diagnosis.
- Academic records.
- This is information needed to document for the RED.

Case Study - What have we learned so far?

- Previous Dx health impairment (at birth) and Dx of Autism at age 6-7 years.
- Neuropsychological testing showing weaknesses in executive functioning.
- Had OT/PT for delays in early childhood
- Mild hearing loss and chronic ear infections in childhood
- Late onset of stuttering with no family history
- Previous IEP, speech was not identified as disability related need
- Private speech for limited time (3 months)- for social skills, some fluency - parents not involved in therapy.

Observations

Think "ACE"

Assertiveness - willingness to communicate either with or without stutter.

Confidence - voice volume, varying intonation, non-verbal body language

Effectiveness - speaks with efficiency in terms of rate and forward movement. Speech is intelligible and displays appropriate language abilities.

Ribbler (2007) and Scott (2010)

Parent and Teacher Ratings and Checklists

- Test of Childhood Stuttering: Observational Rating Scales
- Teacher questionnaire
  https://www.mnsu.edu/comdis/kuster/TherapyWWW/4questionnaireteacherfluency.pdf
- Predictive Cluttering Inventory
  http://www.mnsu.edu/comdis/isad10/papers/daly10/dalycluttering2006R.pdf
- Start educating classroom teacher on how stuttering may manifest in older child.

Parent/Teacher Contacts - Case Study

- Teacher - Student is a regular contributor to class - stuttering doesn't seem to "bother him." Ideas can be unclear. She most notices stuttering during presentations in front of class. He avoids eye contact and has many interjections along with unusual phrasing.
- Mother reports father often asks the son to "talk slowly" which doesn't help and frustrates her son.
- Both Parents - concern about son's inability to explain things clearly, many restarts and fillers, gives up speaking, appears to substitute words or uses unusual word choices, loses eye contact and amount of effort to listen to him.

Collecting Speech Samples

Speech samples are integral to determine whether or not a student has a fluency disorder (i.e., stuttering, cluttering, or atypical disfluency), to estimate any impact on communication efficiency, and for treatment planning.

There is no universally adopted system of speech sample analysis for purposes of assessment of stuttering and fluency (Yairi and Seery 2015). However, there are some accepted guidelines for their collection and analysis:

Speech Sampling Guidelines

- Aim to collect speech samples across **various environments** including the home environment, and with **varying speech tasks** such as single word answers, repeating sentences of varying lengths and complexities, answering questions, during conversation, reading, narration or expository tasks.
- Sampling a child's fluency in a single situation is unlikely to result in a representative sample of behavior, as a child who stutters (or clutters) may be able to display near normal levels of fluency in some situations or with extra effort (Yaruss, 1997).

Speech Sampling Guidelines

- Many researchers in stuttering (Yairi and Seery 2015; Manning and DiLollo 2018) advocate for at least 300-500 words or syllables for the conversational and/or narrative/expository speech sample. Typically a narrative or expository speech sample may generate more examples of disfluency than conversation (Byrd, Logan and Gillam 2012).
- For students with less frequent stuttering, longer speech samples (i.e, 600 to 1200 syllables) may be necessary to accurately diagnose a fluency disorder (Yairi and Seery 2015).
- The minimum criteria for stuttering frequency in order to be diagnosed with a fluency disorder is often considered to be over 2-3% syllables stuttered (Yairi and Ambrose 2005).

Speech Samping Guidelines

- General guidelines for severity of stuttering utilize the frequency of stuttering events, the duration of events and the intensity of secondary characteristics such as body movements. It is important to consider that any severity rating, determined by the frequency and duration of stuttering moments, does not necessarily correlate with the impact of stuttering for any particular child.
- The disfluencies of children who stutter are predominantly stutter-like disfluencies (about ⅔ of total disfluencies and may include part-word repetitions, single syllable word repetitions and dysrhythmic phonations). This contrasts with the disfluencies of children who do not stutter, who have ⅔ of their disfluencies composed of normal or typical disfluencies such as word or phrase repetitions (usually only one iteration), revisions and interjections (Manning and DiLollo 2018).

Continuum of Linguistically Simply to Complex Speech Tasks
Healey, 2006

1. Automatic Speech
2. Short Phrases (repetition tasks)
3. Picture Description (what's going on?)
4. Picture Sequence (tell what is going on in these pictures?)
5. Ego-Centered Topic: tell about birthday or vacation.
6. De-Centered Topic discussion (tell about movie or video game they have played recently).
7. Relational Topic Discussion (expository task).
8. Complex Oral Discourse

Speech Samples - Suspected Cluttering

- Speech samples for cluttering should include language tasks that have more structure, such as generating a sentence about a picture using a target word, as well as more unstructured language samples, such as conversation.
- Typically, speech improves for children who clutter when there is more structure and an increase in self-monitoring of their speech.

Speech Sample Results - Case Study

- 3% SS (syllables stuttered) for conversation (10% total disfluencies)
- 3.9% SS for expository (13.9% total disfluencies)
- 4.3% SS for reading (4.9% total disfluencies)
- 11.9% SS for single word answers (EVT) with also increases in duration of stuttering moments by over 200%.
- 12.7% SS for sentence repetition (15% total disfluencies)
- Parents listened and rated the stuttering on expository and reported that is was slightly milder than typical stuttering at home.

Speech Samples - Norm-Referenced Measures

Stuttering Severity Instrument 4 (SSI-4)

Uses frequency, duration (three longest stuttering moments, and secondary behaviors). Test was normed using only people who stutter. Can be used for all age ranges.

For this case history, student achieved a score of "mild," using reading and the expository sample.

Test of Childhood Stuttering
(Gillam, Logan, & Pearson, 2010)

- Ages 4;0 to 12;11 - could have used for younger child in case study.
- Norm-references with CWNS and CWS in norming sample. Gives standard score with mean of 100.
- Greatest Strength - variety of linguistic tasks to sample fluency and gain information about language skills at same time.
- Four Tasks - rapid naming, structured sentences, answering questions about a story, narrative with picture support.
- Includes Observational Rating Scales for Parents and School Staff.
- Easier to Score - Put "1/0" for stuttering/no stuttering on first 3 words.
- NOT to be used for atypical (final) disfluencies.
- Includes the observational rating scales for parents and teachers.

Linguistic Factors

The motor system of a PWS is vulnerable to increased linguistic demands.
Stuttering tends to occur more on:
Low-frequency words
Words in the beginning of a phrase
In utterances above a child's MLU
Longer or more syntactically complex utterances
Function vs content words (at onset then switches)
The onset of stuttering for most children corresponds to a period of rapid language change.

Language Information

- ⅓+ of CWS have phonological impairment
- ⅓+of CWS have language delay or unequal development
- Advanced language may be a risk factor
- Items on Language Testing can be used for fluency analysis
- Vocabulary Testing (PPVT, EVT, etc.) - if word finding suspected give Test of Word Finding
- CELF 5 or equivalent.
- Language sample - commensurate with other testing?
- Narrative Assessment - Test of Narrative Language?
- Hodson - HAPP3 or Goldman Fristoe for phonological delays and articulation concerns.

Case Study - Language Testing

PPVT4 - SS of 98

EVT3 - SS of 108

CELF5: USP = 9; FS = 9; RS = 6; SR = 12

Expository Language Sample: MLU at mean, Subordinate Index one SD lower than mean, 2 SD higher than mean for "mazes," and 1.7 SD higher for "utterances with errors"

Could use Test of Narrative Language to elicit narratives if not using SALT, but didn't in this case due to age and access to SALT.

Cognitive/Affective Assessments

- Chmela and Reardon, The School-Age child who stutters; Practical ideas for working with feelings and beliefs about stuttering.SFA.
- BAB - Behavioral Assessment Battery for School-Age Children Who Stutter (Brutten & Vanryckeghem, 2006); ages 6-15.
- **OASES - Overall Assessment of the Speaker's Experience of Stuttering (Yaruss, Coleman, and Quesal, 2010); ages 7-12; 13-17.**
- Communication Attitude Test for Preschool and Kindergarten Children Who Stutter (KiddyCAT; Vanryckeghem & Brutten)

Free Cognitive/Affective Protocols

- SSI4 (Riley, 2009) - Chapter 4 in manual - Clinical Use of Self-Reports (CUSR) - 9 point scale for speakers to self-rate their stuttering. (If you have the SSI4 - this comes with it).
- Erikson 24 Scale - http://web.archive.org/web/20140802072817/http://cehs.unl.edu/fluency/pdfs/erickson.pdf
- Communication Attitudes Test Revised (Brutten 1997) https://communication-attitude-test-form-a.pdffiller.com/

Informal Student Interview

- What's been going well at school thus far?
- What are some things that you wish could be easier at school?
- Who do you like talking to in class, lunch, recess?
- If you think about reading, short answers, longer answers, reading aloud, giving a presentation...when do you find yourself participating the most?
- Where do you feel it is harder to talk?
- Have you noticed some people reacting in a funny way or mean way when you talk?

Specific and Follow-Up Questions for Talking about Stuttering

What does that mean?
What does it look and sound like?
When does it happen?
Who does it happen with?
What do you do when it happens?
Do you know why it happens?
Has anyone ever said anything to you about it?
Is there anything you do to make it better or easier?
Does it ever make you feel....."
How did you get so smart about this?

Case Study - Attitudes/Emotions

OASES - Overall Total =2.1; Mild/Moderate; 1. General Information - 2.7; Moderate; 2. Reactions to Stuttering - 2.04; Mild/Moderate; 3. Communication in Daily Situations - 2.25; Moderate; Quality of Life - 1.42; Mild

In section 3, the student rated situations from "1=not at all hard to 5=extremely hard." The only item that he rated "very hard = 4" was "giving a presentation or talk when in front of the class." The student rated many items in this section as "somewhat hard=3" including the following: talking when you are upset or in a hurry, talking to a large group of people, talking with people you have just met, starting a conversation with someone, ordering food, and talking with girls."

In section 1, the student said that he knew "nothing" about stuttering and what factors influence stuttering.

Situational Checklist - Case Study

Self-Efficacy For Adolescents Scale (Manning 1994) - on 100 items ratings from 1-10 how willing you are to enter into a speaking situation where 1=least amount of fear and discomfort to 10= most amount of fear and discomfort.

Student averaged 5.49 - (average for non-stutterers = 4.59 and individuals who stutter = 3.46)

Highest scores on situations that necessitate a specific answer such as "telling your teacher at school your name and address" and "telling the police officer your home address" along with "ordering food in a fast-food restaurant."

Temperament & Sensory Information

- Behavioral Style
- Pattern of experiencing or reacting to the environment by the individual.
- Thomas and Chess - 9 factors
  - Activity level, rhythmicity, approach/withdrawal, regularity of psychological functions, adaptability, intensity, mood, persistence, attention span
- Temperamental risk factors are particular to the situation - i.e. "goodness of fit"
  - No inherently good or bad temperament.
  - Stable over time - kids when young react similarly to when they are older.

Temperament - Conture, Kelly, & Walden

Speculated whether or not...
- Stuttering leads to specific temperament characteristics??
- Specific temperament characteristics lead to stuttering?? OR
- Bidirectional relationship??

Factors Linked to Increased Stuttering
- Increased reactivity or decreased self-regulation
- Less able to inhibit or adapt response style
- Less able to shift attention away from emotionally-laden stimuli
- Less able to self-monitor
- Less efficient in attention regulation

Temperament and Sensory Information

- Class Observation
- Teacher and Parent Report
- Medical History
- Nine Characteristics of Temperament by Thomas and Chess -
- https://centerforparentingeducation.org/wp-content/uploads/2014/03/Temperament-Scales-.pdf
- OTs can be helpful here

Case Study - Sensory Information

Thomas & Chess (1-10 rating scale)

Activity = 3 (10 is highest level)

Regularity = 7 (10 is most regular)

Initial Reaction (withdraw/approach) = 3 (10 is approach)

Adaptability = 4 (10 is very flexible)

Intensity of Reaction = 3 (10 is most intense)

Mood = 4 (10 is most positive)

Distractible = 7 (10 is very easily distracted)

Persistence and Attention = 6 (10 is most persistent)

Sensitivity = 4 (1=low threshold/easily impacted and 10=high threshold)

Ways to Think about Fluency Assessment

Three part diagnostic statement

(Chmela, K & Campbell, J. 2014).

1. State the Fluency Problem and other s/l problems if present.
2. Describe contributing factors to fluency problem (other medical dx, attitudes and feelings, environment, etc.)
3. Define communication discrepancies or those speaking situations where the problem(s) adversely affect the child.

CALMS

The CALMS model, developed by Healey, Scott Trautman, & Susca (2004), proposes stuttering is maintained by five domains or factors. These include

- Cognitive,
- Affective,
- Linguistic,
- Motor, and
- Social contributions to a fluency disorder.

….and may want to consider adding "Sensory" to the /S/!

Thankyou!

Do not hesitate to contact me with any questions or ideas.

laura@spotlightonstuttering.com

www.spotlightonstuttering.com

Imagine yourself...as a Board Certified Specialist in Fluency !
You could be [name] CCC-SLP, BCS-F

Feel confident helping people who stutter of all ages achieve their goals...

Consider pursuing specialty certification with The American Board of Fluency and Fluency Disorders

www.stutteringspecialists.org

DPI Resources

Assessment Tools for Speech or Language Impairment website
- Evaluation of Speech: New Considerations
- WI DPI Technical Assistance Guide (2003)
- Dynamic Assessment
- Comprehensive Special Education

Resources to Come

Wednesday, October 6, 2021 – 3:30-5:00pm
  Best Practices when Assessing English Learners I *with Courtney Seidel, UW-Madison*
Wednesday, November 3, 2021 – 3:30-5:00pm
  Best Practices When Assessing English Learners II *with Courtney Seidel*
Wednesday, December 1, 2021- 3:30-5:00 pm
  Dynamic Assessment Part 2
Wednesday, February 2, 2022 – 3:30-5:00pm
  Language Assessment
Wednesday, March 2, 2022 – 3:30-5:00pm
  Assessment of Voice