

Building an Appendix of Tools as a Resource for Comprehensive Assessment and Treatment of Stuttering (Part I)

This was too big for one hour, so we will do assessment this year and treatment next year!

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Fluency and
Fluency Disorders
ASHA SIG 4

Disclosures

- Financial:
- Each of the authors receives a salary from their respective employers

- Non-financial:
- All presenters are on the SIG4 Steering Committee and have affiliations with self-help groups

This presentation is dedicated to Dr. Walt Manning



Resources for fluency disorders

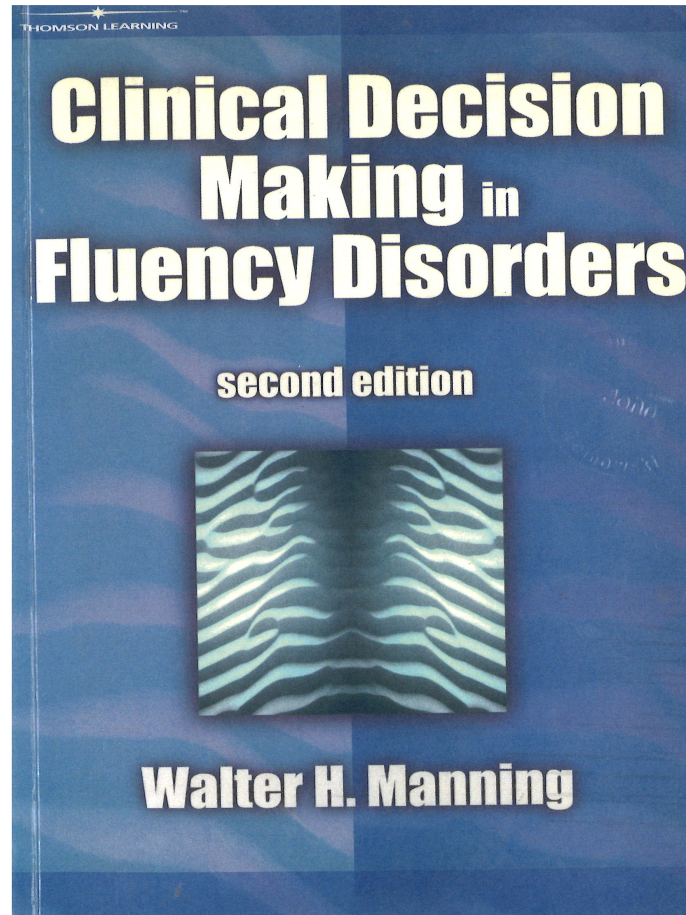
- Different philosophies
- Different times
- Different viewpoints
- Different training
- Different goals

How do we stay current and
authoritative and efficacious

We all have limitations, due to.....

- Time
- Insurance or employer restrictions
- Work setting restrictions
- Qualifications
- Limited fluency caseload
- Limited training/experiences

In the second edition of Clinical Decision Making in Fluency Disorders



APPENDIX

A

ANNOTATIVE LISTING OF ASSESSMENT PROCEDURES

1. Adams, M.R. (1977a). A clinical strategy for differentiating the normal nonfluent child and the incipient stutterer. *Journal of Fluency Disorders*, 2, 141-148.

This measure is designed for preschool children. The clinician first obtains a 300-500 word sample of conversational speech. The following five behaviors are used to identify nonnormal speech: (1) more than 10 fluency breaks per 100 words, (2) occurrences of part-word repetitions and prolongations, (3) part-word repetitions of four or more units, (4) cessation of airflow/voicing, and (5) schwa vowel substitutions. The analysis can be somewhat time-consuming, and the clinician must be certain that one or more representative samples of the child's speech can be obtained.

2. Ammons, R., & Johnson, W. (1944). Iowa Scale of attitudes toward stuttering. In *Studies in the psychology of stuttering*. *Journal of Speech Disorders*, 9, 39-49.

This five-point rating scale consists of 45 statements about stutterers and what they should or should not do or feel in various speaking situations. The stutterer's intolerance (avoidance) may indicate the need for counseling therapy or modification of attitudes through hierarchical practice.

Purpose

- The purpose of this seminar is to list and briefly review the tools to evaluate clients with suspected fluency disorders.
- Provide you with a similar, but updated appendix.

Order of presentation

- I. Assessment tools for young children
- II. Assessment tools used with school aged children
- III. Assessment tools used with adolescents and teens
- IV. Assessment tools used with adults
- V. Others (parents, physicians, other fluency disorders)
- VI. A case
- VII. Questions
- VII References



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Assessment Tools with Young Children Suspected of Stuttering



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What information do I need and why?

- To determine if the child is showing stuttering behaviors versus other types of fluency issues
- To understand the severity/variability of stuttering behaviors
- To chart the progression of the condition
- In schools, to advocate for educational necessity
- To share findings with parents/schools/ other stake holders
- To help establish appropriate goals

TOCS: Test of Childhood Stuttering; Gillam, Logan & Pearson, 2009

- suitable for ages 4-12
- Is a measure of stuttering severity, that is derived from speech samples elicited from a variety of tasks including:
 - Rapid Picture Naming
 - Modeled Sentences
 - Structured Conversation
 - Narration
- similar to the SSI-4, includes supplementary assessments to further analyze stuttering moments.
- includes rating scales to gather information from parents, teachers, etc.

Eight supplementary fluency-related scales

- These assessments allow for probes in greater detail:
 - 1.clinical interviews
 - 2.comprehensive analysis of disfluency frequency and types
 - 3.speech rate analysis
 - 4.disfluency duration analysis
 - 5.repetition length analysis
 - 6.associated behavior analysis
 - 7.stuttering frequency analysis
 - 8.speech naturalness analysis

Stuttering Severity Instrument-4

Riley, 2009

- Suitable for ages 3 and up
- Based on measures of:
 - Short reading passage
 - A short narrative or picture description (non-readers)
- Intended to give a norm referenced score of severity of observable aspects of stuttering. Scores for:
 1. frequency
 2. duration
 3. physical concomitants
 4. naturalness of the individual's speech

Stuttering Severity Instrument-4 (sample)

- Speaking task (non-reader) 30.1%
 - Score of 18
 - TOTAL FREQUENCY = 18
- Duration: 1,2,2 (X = 1.66)
 - Score of 6
 - TOTAL DURATION = 6
- Physical Concomitants:
 - Distracting Sounds = 0
 - Facial Grimaces = 3
 - Head Movements = 0
 - Movement of Extremities = 2
 - TOTAL PHYSICAL CON = 5
- TOTAL SCORE (18+6+5) = 29
 - Percentile = 84; Severity = SEVERE

Stuttering Severity Instrument-4
SSI-4
Examiner Record Form
Glyndon D. Riley

Identifying Information

Name Greg Female Male
 Grade Preschool Date of Birth 8-8-2005
 Date of testing 10-24-2009 Age 4-3
 School Buckley Examiner Mr. Shipman
 Preschool School Age Adult Reader Nonreader

Frequency (Use Readers Table or Nonreaders Table, not both)

1. Reading Task		2. Speaking Task		3. Speaking Task	
%SS	Task Score	%SS	Task Score	%SS	Task Score
1	2	1	2	1	4
2	4	2	3	2	6
3-4	5	3	4	3	8
5-7	6	4-5	5	4-5	10
8-12	7	6-7	6	6-7	12
13-20	8	8-11	7	8-11	14
21 & up	9	12-21	8	12-21	16
		22 & up	9	22 & up	18

Frequency Score (use 1 + 2 or 3) 18

Duration

Average length of three longest stuttering events timed to the nearest 1/10th second	Scale Score
Fleeting (.5 sec or less)	2
Half-second (.5- .9 sec)	4
1 full second (1.0-1.9 sec)	6
2 seconds (2.0-2.9 sec)	8
3 seconds (3.0-4.9 sec)	10
5 seconds (5.0-9.9 sec)	12
10 seconds (10.0-29.9 sec)	14
30 seconds (30.0-59.9 sec)	16
1 minute (60 sec or more)	18

Duration Score 6

Physical Concomitants

Evaluating Scale: 0 = none
 1 = not noticeable unless looking for it
 2 = barely noticeable to casual observer
 3 = distracting
 4 = very distracting
 5 = severe and painful looking

Distracting Sounds: Noisy breathing, whistling, sniffing, blowing, clicking sounds. 0 1 2 3 4 5

Facial Grimaces: Jaw jerking, tongue protruding, lip pressing, jaw muscles tense. 3 0 1 2 3 4 5

Head Movements: Back, forward, turning away, poor eye contact, constant looking around. 0 1 2 3 4 5

Movements of the Extremities: Arm and hand movement, hands about face, torso movement, leg movements, foot-tapping, or swinging. 2 0 1 2 3 4 5

Total Score Physical Concomitants Score 5

Frequency 18 + Duration 6 + Physical Concomitants 5 = 29 Percentile 84% Severity Severe

Figure 2.2. Sample page 1 of Examiner Record Form completed for Greg, a nonreading preschooler.

KiddyCAT: Communication Attitude Test for Preschool and Kindergarten Children Who Stutter, Vanryckeghem & Brutten, 2007

- suitable for children 6 and under
- A 12 item yes/no questionnaire to gauge the child's attitudes towards speaking
- It is norm-referenced
- A good way to supplement testing that only explores behavioral aspects of stuttering
- It helps provide information about the psychological impact of stuttering on the young child

A-19 Scale For Children Who Stutter

Guitar & Grims, 1977

- Suitable for K-4th grade
- a 19 item yes/no questionnaire to assess communication attitudes in children who stutter
- Not currently norm-referenced, but the authors claim that as a child “improves” their attitude will also “improve”

A-19 SCALE

Name _____ Date _____

1.	Is it best to keep your mouth shut when you are in trouble?	YES	NO
2.	When the teacher calls on you, do you get nervous?	YES	NO
3.	Do you ask a lot of questions in class?	YES	NO
4.	Do you like to talk on the phone?	YES	NO
5.	If you did not know a person, would you tell them your name?	YES	NO
6.	Is it hard to talk to your teacher?	YES	NO
7.	Would you go up to a new boy or girl in your class?	YES	NO
8.	Is it hard to keep control of your voice when talking?	YES	NO
9.	Even when you know the right answer, are you afraid to say it?	YES	NO
10.	Do you like to tell other children what to do?	YES	NO
11.	Is it fun to talk to your dad?	YES	NO
12.	Do you like to tell stories to your classmates?	YES	NO
13.	Do you wish you could say things as clearly as the other kids do?	YES	NO
14.	Would you rather look at a comic book than talk to a friend?	YES	NO
15.	Are you upset when someone interrupts you?	YES	NO
16.	When you want to say something, do you just say it?	YES	NO
17.	Is talking to your friends more fun than playing by yourself?	YES	NO
18.	Are you sometimes unhappy?	YES	NO
19.	Are you a little afraid to talk on the phone?	YES	NO

SALT and CLAN (FluCalc)

- software that allows clinicians to complete both language sample analysis and stuttering analysis that can be compared to a normative database
- can be utilized with variety of standardized assessments
- SALT is appropriate for use with bilingual (English/Spanish) speakers as well

Weighted stuttering like disfluency score (Ambrose & Yairi, 1999)

- The weighted SLD considers three dysfluency dimensions:
 - the type and frequency of SLD (PW repetitions, SS whole-word repetitions, and dysrhythmic productions—DP blocks, broken words, and prolongations)
 - the average number of RUs into one score
- The importance of this score is that it shows the potential for recovery for young children (Ambrose & Yairi, 1999) and more recently in older children (Walsh, et al, 2020)

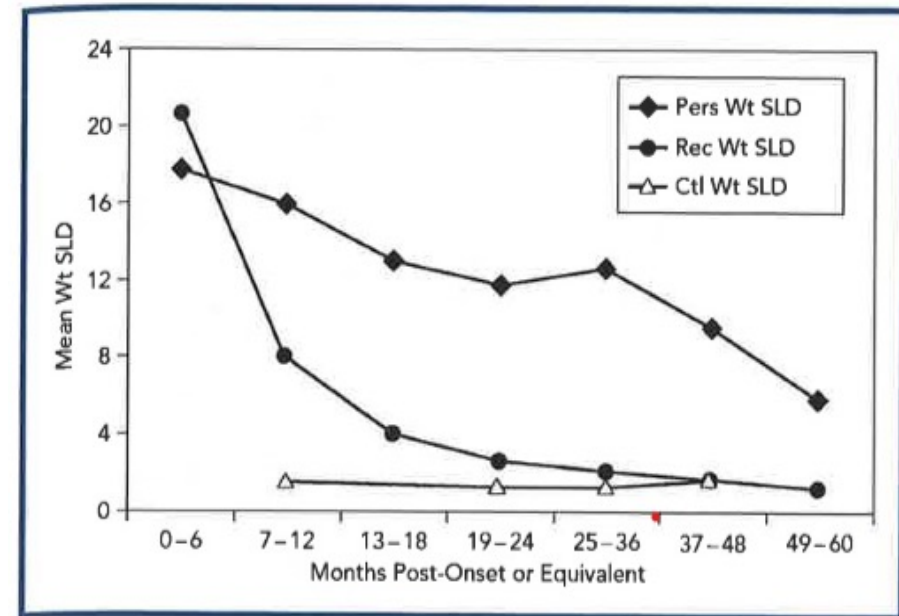


FIGURE 4-1. Mean weighted (Wt) SLD for persistent (Pers), recovered (Rec), and control (Ctl) groups over time. (From *Early Childhood Stuttering* (p. 177), by E. Yairi and N. G. Ambrose, 2005, Austin, TX: Pro-Ed. Copyright 2005 by Pro-Ed, Inc. Reprinted with permission.)

Behavioral Style Questionnaire (BSQ)

McDevitt & Carey, 1978

- used with children aged 3-7
- a widely used temperament test in preschool children that predicts temperament types that may be associated with stuttering
- The full version is 100 items with shorter versions available for follow-up

Summary

- For young children, there are tools available to assess:
 - Observable stuttering behaviors
 - Attitudes of children about talking and stuttering
 - In-depth analysis to help with linguistic components
 - Prediction of persistence
 - Temperament

Assessment Tools with School-Age Children

Some will be repeated because they are used across age groups



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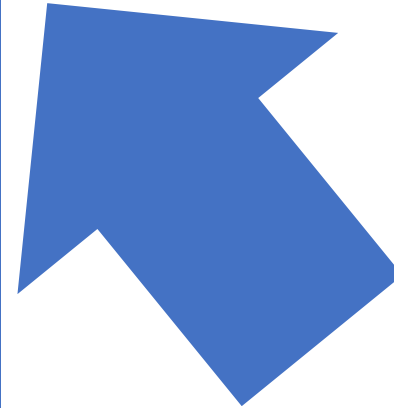
What information do I need and why?

- To align with the child and parent/s
- To understand the severity/variability of stuttering behaviors
- In schools, to advocate for educational necessity
- To understand how other goals may affect fluency
- To create a system of support
- To encourage self-advocacy
- To establish appropriate goals

Purpose of assessment

- To align with the child and parent/s
- To understand the severity/variability of stuttering behaviors
- In schools, to advocate for educational necessity

- To understand how other goals may affect fluency
- To create a system of support
- To encourage self-advocacy



To
understand



To guide
treatment

To understand stuttering behaviors


- **Stuttering Severity Instrument – 4th Edition (SSI-4)** (this one already appeared and will appear again soon!)
- **Test of Childhood Stuttering (TOCS)** (this one already appeared!)
 - Gillam, Logan, and Pearson (2009)
 - 4-12 years
 - Presents four subtests of increasing linguistic complexity
 - Word fluency during rapid picture presentation
 - Modeled sentences/sentential syntax
 - Conversation/dialog
 - Narration/monologue

To assess how stuttering affects educational performance (child's reaction to stuttering)

- **Communication Attitudes Test (CAT)** (more to come!)
- **Overall Assessment of The Speaker's Experience of Stuttering-School-Age (OASES-S)**
 - Yaruss, Coleman & Quesal (2016)
 - Ages 7-12
 - Takes about 15-20 minutes to complete
 - Gives a broad range of child's experiences of stuttering—their perceptions, the communication difficulties it presents, the effect on overall quality of life
 - Versions for children, teens and adults

OASES-S

- Impact ratings from mild to severe with subscores for:
 - General information
 - Reactions to stuttering
 - Communication in daily settings
 - Quality of life



OASES™
Overall Assessment of the
Speaker's Experience of Stuttering

OASES-S
Response Form
School-Age: Ages 7-12

J. Scott Yaruss, PhD, CCC-SLP, BCS-F, F-ASHA
Craig E. Coleman, MA, CCC-SLP, BCS-F
Robert W. Quesal, PhD, CCC-SLP, BCS-F, F-ASHA

Name: _____

Birth Date: ____/____/____ Age: ____ Grade: ____ Sex/Gender: _____

Test Date: ____/____/____ ID Number: _____


General Instructions:
This form includes four sections of questions that ask about your *current* experiences with your speech and stuttering. For each question, please circle the number that applies to you. Please try to answer every question. If a question does not apply to you, please check the box and move on to the next question. If you are not sure how to answer any of the questions, you may ask for help. An adult can read the test to you if you would like.

Scoring: For Office Use Only

Instructions for Clinicians:

- Calculate Impact Scores for each of the four sections on the OASES-S by first summing the number of points in each section (A) and then counting the number of items completed in each section (B). Divide the total number of points (A) by the number of items completed (B) to obtain the Impact Score.
- Calculate the Overall Impact Score by summing the numbers in columns (A) and (B) at the bottom of each column. Divide the sum of (A) by the sum of (B) to obtain the Overall Impact Score.
- Impact Scores range between 1.0 and 5.0. Circle the Impact Rating that corresponds to the score for each section and for the Overall Impact.

	Impact Score			Impact Rating				
	A Points	B Items Completed	A ÷ B = Impact Score	Score 1.00–1.49	Score 1.50–2.24	Score 2.25–2.99	Score 3.00–3.74	Score 3.75–5.00
Section I: General Information	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section II: Speaker's Reactions	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section III: Daily Communication	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section IV: Quality of Life	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
OVERALL Impact:	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe



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To understand how other goals might affect treatment

- Assess known variables that affect fluency: linguistic complexity, motor planning/programming, temperament
- These are normally done by collecting and analyzing speech samples across various levels of length, complexity, motor difficulty, cognitive load
- There are also many scales available to gauge temperament, for example:
- **Integrative Child Temperament Screener (ICTS)**
 - Zentner, M. (2020)
 - 9-item scale (frustration, inhibition, attention)
- **Child Behavior Checklist (CBCL)**
 - Achenbach, & Rescorla (2001)
 - Looking at problem behaviors in children

To create a system of support

- Upcoming! A section on parent questionnaires
- Teacher questionnaires also valuable

To encourage self-advocacy

- Not a test or scale, but a starting point for discussion:
- **Assessment of Lagging Skills and Unsolved Problems (ALSUP)**
 - Greene, 2020
 - Primarily for working through challenging behavior
 - But can also be used to assess children's perspectives on their own problems and to teach children to self-advocate (with support)

Summary

- For school-age children, there are tools available to assess:
 - Observable stuttering behaviors
 - Attitudes of children about talking and stuttering
 - Tools to assist in self-advocacy
 - Reactions to stuttering
 - Temperament

Assessment Tools with Teens

Some will be repeated because they are used across age groups



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What information do I need and why?


- To understand the severity/variability of stuttering behaviors
- To understand the experience of stuttering for the teen
- To align with the child and parent/s
- In schools, to advocate for educational necessity
- To understand how other goals may affect fluency
- To create a system of support
- To encourage self-advocacy
- To establish appropriate goals

Stuttering Severity Instrument – 4th Edition (SSI-4): Riley, 2009

- Is a measure of stuttering severity, that is derived from evaluating two speech samples (reading and conversation) for:
 - Frequency of stuttering
 - Duration of stuttering moments; and
 - Subjective rating of any physical concomitants
- This accounts for most dimensions of observable stuttering moments and therefore is a good tool to record changes in overt stuttering moments.

Overall Assessment of The Speaker's Experience of Stuttering (OASES-T); Yaruss, Quesal & Coleman, 2016

- A comprehensive self-report questionnaire based on the World Health Organization's International Classification of Functioning, Disability, and Health (ICF) Model.
- 80-item questionnaire, measures the impact of stuttering across four domains (sub-sections) and is designed to be used for teens, ages 13-17.



OASES™
Overall Assessment of the
Speaker's Experience of Stuttering

OASES-T
Response Form
Teenage: Ages 13-17

J. Scott Yaruss, PhD, CCC-SLP, BCS-F, F-ASHA
Robert W. Quesal, PhD, CCC-SLP, BCS-F, F-ASHA
Craig E. Coleman, MA, CCC-SLP, BCS-F

Name: _____

Birth Date: ____/____/____ Age: ____ Grade: ____ Sex/Gender: _____

Test Date: ____/____/____ ID Number: _____


General Instructions:
This form includes four sections of questions that examine different aspects of your experiences with stuttering. Please complete each question in each section by circling the appropriate number. Please think about how you are currently feeling or speaking when answering each question. Please try to answer every question. Some of the questions do not apply to everyone. If one of the questions do not apply to you, please check the "Not Applicable" box and go on to the next question.

Scoring: For Office Use Only

Instructions for Clinicians:

- Calculate Impact Scores for each of the four sections on the OASES-T by first summing the number of points in each section (A) and then counting the number of items completed in each section (B). Divide the total number of points (A) by the number of items completed (B) to obtain the Impact Score.
- Calculate the Overall Impact Score by summing the numbers in columns (A) and (B) at the bottom of each column. Divide the sum of (A) by the sum of (B) to obtain the Overall Impact Score.
- Impact Scores range between 1.0 and 5.0. Circle the Impact Rating that corresponds to the score for each section and for the Overall Impact.

	Impact Score			Impact Rating				
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Section I: General Information	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section II: Speaker's Reactions	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section III: Daily Communication	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section IV: Quality of Life	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
OVERALL Impact:	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe



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Brief Version of the Unhelpful Thoughts and Beliefs About Stuttering (UTBAS-6); St. Clare, et al., 2009; Iverach et al., 2016

- Can be used with children and adults
- Short, 6-item version based on the full 198-question version of the UTBAS scale helps efficiently screen individuals for unhelpful thoughts and beliefs associated with speech-related/social anxiety.
- This likert-type scale has items like:
 - “People will think I’m incompetent because I stutter”
 - “I’ll never finish explaining my point....they’ll never understand me”

BAB: Behavioral Assessment Battery for school-age children who stutter; Brutten & Vanryckeghem, 2007

- Includes three multidimensional self-report scales designed for ages 6-15 years
 - Speech Situation Checklists (SSC-Er & SSC-SD): to evaluate child's emotion reaction to, and speech disruption in a range of speaking situations
 - The Behavioral Checklist (BCL) – coping responses a child uses to deal with stuttering
 - The Communication Attitude Test (CAT) – measures child's attitudes about their speech

Self-Stigma of Stuttering Scale (4S)

Boyle, 2013

- A self-report scale designed to measure the levels of self-stigma reported by older teens and adults who stutter.
- Measures self-stigma across 3 domains:
 - self-esteem
 - self-efficacy
 - life satisfaction
- Items include statements like:
 - “Because I stutter, I stop myself from taking part in discussions”

Peer Attitudes Toward Children who Stutter (PATCS); Langevin et al., 2009

- A self-report scale to be administered to “peers” of children who stutter to determine changes in attitudes toward stuttering and their classmates who stuttering
- Validated across grades 3-6, the purpose of the PATCS is to provide guiding information in the creation of educational programs about stuttering in the schools.
- The 36-item questionnaire that consists of three subscales that measure the constructs of:
 - Positive Social Distance
 - Social Pressure
 - Verbal Interaction

Summary

- For teens who stutter, there are tools available to assess:
 - Observable stuttering behaviors
 - Attitudes of children about talking and stuttering
 - Situational difficulty
 - Unhelpful thoughts/coping behaviors
 - In-depth analysis to help with linguistic components
 - Self-stigma
 - Peer attitudes

Assessment Tools with Adults



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What information do I need and why?

- To understand the severity/variability of stuttering behaviors
- To understand the experience/perceptions of stuttering
- To understand situational difficulty/fears
- To understand attitudes and feelings about stuttering
- To develop a situational hierarchy
- To understand how a person is impacted by stuttering
- To encourage self-advocacy
- To establish appropriate goals

Iowa Scale of Attitudes Toward Stuttering; Johnson et al, 1963

- A 45-item scale designed to assess the attitudes toward stuttering of adult PWS and their listeners. The individual responds to each item by circling one of five points on an ordinal scale ranging from strongly agree to strongly disagree.
- The lower the score, the better the respondent's attitude.

Stuttering Severity Scale (SS); Lanyon, 1967

- A 64-item paper and pencil scale designed to evaluate the overt behaviors of older teens and AWS. The respondent answers true/false which are then converted to ratings on a 1 (mild) to 7 (severe) scale.
 - Example statements: “I worry about the fact that I am a stutterer. When I talk, I often become short of breath”).

Perception of Stuttering Inventory; Woolf, 1967

- An inventory intended to determine the avoidance, struggle, and expectancy of older adolescent and AWS. The individual responds to 60 behavioral and attitude characteristics by indicating whether they are characteristic themselves. Items that are not typical of their behavior are left unmarked.
- Examples include: “Avoiding talking to people in authority,” (avoidance) “Having extra and unnecessary facial movements,” (struggle) “Adding an extra sound in order to get started” (expectancy).

Erickson S-24 Scale; Andrews & Cutler, 1974

- Easily-administered 24-item scale used to obtain information about a client's communication attitudes. This questionnaire has been normed on both PWS and PWDNS.
- Nonstuttering adults respond as a PWS would to an average of 9.14 of the items
- Stuttering adults respond as a PWS would to an average of 19.22 of the items

Fear Survey Schedule; Brutten & Shoemaker, 1974

- Designed for both children and adults. For adults, there are 51 items rated in a scale of 1 (no fear) to 5 (great fear) indicating amount of fear associated with a variety of things (sharp objects, criticism, death, authority figures, etc.).
- Average score for nonstuttering adults = 70.45, stuttering adults = 108.08

Speech Situation Checklist; Brutten & Shoemaker, 1974

- Designed for both children and adults to assess speech-related anxiety and speech disruptions for tasks such as talking on the phone, giving your name, asking for help, etc.
- For adults, there are 51 items rated in a scale of 1 (no anxiety; no disruptions) to 5 (much anxiety; many disruptions) indicating amount of fear associated with a variety of things (sharp objects, criticism, death, authority figures, etc.).

Locus of Control Behavior Scale (LCB); Craig et al., 1984

- 17-item Likert scale designed to measure the degree to which a person perceives events as being a consequence of their own behavior and takes responsibility for maintaining a new (desired) behavior. Scale has been shown to have good internal reliability and is not influenced by sex, age, or social desirability.
- Higher scores on LCB reflect greater self-perception of external control whereas lower scores indicate greater internal control.
- Scale may help to predict those PWS who will relapse after treatment.

Self-efficacy scaling by adult stutterers; Manning, 1994 (also in his texts)

- Designed to measure the confidence that an adult PWS can (1) enter into speaking situations outside of treatment and (2) achieve a predetermined level of fluency in that situation.
- A decile (10-100) scale is used, and the respondent assigns a value to each situation and scores are averaged across 50 speaking situations.

Crowe's protocols: A comprehensive guide to stuttering intervention; Crowe et al., 2000

- Protocol includes forms and scales (3-point and 7-point) for obtaining case history, cultural information, and client self-assessment.
- Components include assessment of affective, behavioral, cognitive, speech status, stimulability, and measures of severity.
- Several sections and forms are designed to provide information for counseling during treatment.

Stuttering Severity Instrument – 4th Edition; Riley, 2009


- A measure of stuttering severity, that is derived from evaluating two speech samples (reading and conversation) for:
 - Frequency of stuttering
 - Duration of stuttering moments; and
 - Subjective rating of any physical concomitants
- This accounts for most dimensions of observable stuttering moments and therefore is a good tool to record changes in overt stuttering moments.

Behavior Assessment Battery for Adults Who Stutter; Vanryckeghem & Brutten, 2018

- An online-only, multi-dimensional set of inter-related, evidence-based, self-report tests that provide normative data for adults.
- These self-report test procedures provide clinicians assisting individuals who are dysfluent, with a multi-modal view of how an adult is affected by how he or she feels, reacts to, and thinks about his or her speech. The test battery contains four different assessment tools investigating the affective, behavioral and cognitive dimensions that are essential in exploring what comprises a dysfluent client.
- Aside from assisting in differential diagnosis, the tests' items give direction to treatment by indicating the specific targets in need of therapeutic intervention.

Overall Assessment of the Speaker's Experience of Stuttering for Adults (OASES-A); Yaruss & Quesal, 2016

- A 100-item (adult version) comprehensive measure of the impact of stuttering. Results can help qualify individuals for research or therapy, make treatment decisions, and evaluate treatment efficacy.
- OASES is divided into: (1) General information, (2) Affective, behavioral, and cognitive reactions to stuttering, (3) Functional communication difficulties in key situations, and (4) Impact of stuttering on the speaker's quality of life.



Overall Assessment of the
Speaker's Experience of Stuttering

OASES-A
Response Form
Adult: Ages 18 and Above

J. Scott Yaruss, PhD, CCC-SLP, BCS-F, F-ASHA
Robert W. Quesal, PhD, CCC-SLP, BCS-F, F-ASHA

Name: _____

Birth Date: ____/____/____ Age: _____ Sex/Gender: _____

Test Date: ____/____/____ ID Number: _____


General Instructions:
This form includes four sections of questions that examine different aspects of your experiences with stuttering. Please complete each question in each section by circling the appropriate number. Please think about how you are currently feeling or speaking when answering each question. Some of the questions do not apply to everyone. If one of the questions does not apply to you, please check N/A for "Not Applicable" and go on to the next question.

Scoring: For Office Use Only

Instructions for Clinicians:

- Calculate Impact Scores for each of the four sections on the OASES-A by first summing the number of points in each section (A) and then counting the number of items completed in each section (B). Divide the total number of points (A) by the number of items completed (B) to obtain the Impact Score.
- Calculate the Overall Impact Score by summing the numbers in columns (A) and (B) at the bottom of each column. Divide the sum of (A) by the sum of (B) to obtain the Overall Impact Score.
- Impact Scores range between 1.0 and 5.0. Circle the Impact Rating that corresponds to the score for each section and for the Overall Impact.

	Impact Score			Impact Rating				
	A Points	B Items Completed	A ÷ B = Impact Score	Score 1.00-1.49	Score 1.50-2.24	Score 2.25-2.99	Score 3.00-3.74	Score 3.75-5.00
Section I: General Information	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section II: Speaker's Reactions	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section III: Daily Communication	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
Section IV: Quality of Life	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe
OVERALL Impact:	_____ ÷ _____ =	_____	_____	Mild	Mild-Moderate	Moderate	Moderate-Severe	Severe



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www.StutteringTherapyResources.com

Summary

- There are probably the more tools that can be used with adults than any other group
- Many of these are older tests, that are still used today
- Almost any aspect of stuttering attitudes, behaviors, or cognitive impact have long been established for adults that stutter.

Other specialized tools



Fluency and
Fluency Disorders
ASHA SIG 4

These include:

- Motivation to change
- Parents surveys
- Cluttering and other fluency disorders

Stages of Change: Zebrowski et al., 2021

- Scales developed from the Stages of Change Model (Prochaska et al, 1974), indicating readiness to make change in a behavior or condition.
- These scales are based on a transtheoretical model of stuttering
- 1) Using techniques “How ready are you right now to.....”
- 2) Change negative thoughts and feelings
- 3) Say what I want to say

It's important to pay attention to all three of these things because just focusing on one may not be enough to make long-lasting changes.

Thinking about the three things above, how ready are you right now to make positive changes to your stuttering? Place a check mark in the box next to the sentence that best describes you right now.

<input type="checkbox"/>	I am <u>not</u> thinking about making positive changes to my stuttering in the next 6 months.
<input type="checkbox"/>	I am thinking about making positive changes to my stuttering in the next 6 months.
<input type="checkbox"/>	I am planning to make positive changes to my stuttering in the next month.
<input type="checkbox"/>	I have been making positive changes to my stuttering for LESS than 6 months.
<input type="checkbox"/>	I have been making positive changes to my stuttering for MORE than 6 months.

Thinking of these three things separately, one by one...

1. How ready are you right now to get help to learn and use speech techniques for speaking more fluently or stuttering with less tension and struggle?

<input type="checkbox"/>	I am <u>not</u> thinking about doing this in the next 6 months.
<input type="checkbox"/>	I am thinking about doing this in the next 6 months.
<input type="checkbox"/>	I am planning to do this in the next month.
<input type="checkbox"/>	I have been doing this for LESS than 6 months.
<input type="checkbox"/>	I have been doing this for MORE than 6 months.

2. How ready are you right now to change your negative thoughts and feelings about stuttering?

<input type="checkbox"/>	I am <u>not</u> thinking about doing this in the next 6 months.
<input type="checkbox"/>	I am thinking about doing this in the next 6 months.
<input type="checkbox"/>	I am planning to do this in the next month.
<input type="checkbox"/>	I have been doing this for LESS than 6 months.
<input type="checkbox"/>	I have been doing this for MORE than 6 months.

3. How ready are you right now to say what you want to say without avoiding sounds, words, or situations?

<input type="checkbox"/>	I am <u>not</u> thinking about doing this in the next 6 months.
<input type="checkbox"/>	I am thinking about doing this in the next 6 months.
<input type="checkbox"/>	I am planning to do this in the next month.
<input type="checkbox"/>	I have been doing this for LESS than 6 months.
<input type="checkbox"/>	I have been doing this for MORE than 6 months.

Stages of Change

- Pros and Cons (negative thoughts)
- “When thinking about positive change to your stuttering, how important is it to you if....?”

Pros and Cons

Here are some advantages and disadvantages of making positive changes to stuttering. Please rate how important each one is in your deciding whether or not to make positive changes to your stuttering RIGHT NOW.

Your choices:

- 1 = Not at all important to me
- 2 = A little important to me
- 3 = Average importance to me
- 4 = Very important to me
- 5 = The most important to me

Note: If the statement does not apply to you, you should respond "1 = Not at all important"

When thinking about making a positive change to your stuttering, how important is it to you if...?						
		Not at All Important	A Little Important	Average Importance	Very Important	Most Important
1	you wouldn't feel like stuttering runs your life	1	2	3	4	5
2	you would worry less about talking	1	2	3	4	5
3	you might not be able to change the way you speak	1	2	3	4	5
4	other people would disapprove of you trying to change the way you speak	1	2	3	4	5
5	you would feel better about yourself	1	2	3	4	5
6	you could just be yourself	1	2	3	4	5
7	you would lose part of who you are if you stuttered differently	1	2	3	4	5
8	you wouldn't feel like yourself if you stuttered differently	1	2	3	4	5
9	you would feel calmer	1	2	3	4	5
10	you would talk more	1	2	3	4	5
11	people would treat you just like any other person	1	2	3	4	5
12	You would feel a sense of accomplishment	1	2	3	4	5
13	Your speech would sound weird and unnatural to other people	1	2	3	4	5
14	Your speech would sound weird and unnatural to you	1	2	3	4	5
15	You may miss out on other activities to spend time working on your speech	1	2	3	4	5
16	You would be disappointed in yourself if you change the way you speak just to make other people happy	1	2	3	4	5

Stage of Change

- Situational Difficulty/Situational Confidence
- “How sure are you that you can make a positive change to stuttering in that situation RIGHT NOW?”

Situational Confidence

Making a positive change to stuttering can be especially difficult in certain situations. For each of the following situations, please rate how sure you are that you can making a positive change to stuttering in that situation RIGHT NOW.

Your choices:

- 1 = Not at all sure
- 2 = A little sure
- 3 = Moderately sure
- 4 = Very sure
- 5 = The most sure I can be

If the statement does not apply to you, you should respond "1 = Not at all sure"

How sure are you that you can make a positive change to stuttering when...?						
		<i>Not at All Sure</i>	<i>A Little Sure</i>	<i>Moderately Sure</i>	<i>Very Sure</i>	<i>The Most Sure I Can Be</i>
1	you are being interviewed for a job	1	2	3	4	5
2	you are meeting new people	1	2	3	4	5
3	it is a hard talking day	1	2	3	4	5
4	you are feeling stressed out	1	2	3	4	5
5	you are afraid you are going to stutter	1	2	3	4	5
6	you are talking in front of a group of people	1	2	3	4	5
7	you are talking to a teacher	1	2	3	4	5
8	you are telling a story	1	2	3	4	5
9	you are introducing yourself	1	2	3	4	5
10	you are calling someone on the phone	1	2	3	4	5
11	you are ordering in a restaurant	1	2	3	4	5

Palin Parent Rating Scales (Palin PRS); Millard & Davis, 2016

- A 19-item questionnaire measures three factors:
 - the impact of stuttering on the child
 - the severity of stuttering and its impact on the parents
 - the parents' knowledge about stuttering and confidence in managing it
- Based on 0- 10 point scales
- Ex. “Does your child speak less because of their stuttering?”
- Ex. “How worried are you about your child’s stuttering?”
- Ex. “Do you understand what influences your child’s stuttering?”

Vanderbilt Responses to Your Child's Speech Rating Scale (Kelly, 2010; Singer et al., 2022)

- The original version included 40 responses parents may have to the speech of their CWS.
- Parents are asked to indicate how often they responded to each item, over the past 2 months, on a 5-point scale with 0 = *never*, 1 = *rarely*, 2 = *sometimes*, 3 = *often*, and 4 = *always*.
- Based on evidence from EBP and advocacy organizations, items focus on:
 - parents' possible temporal views (e.g., how often they slow down their speech)
 - Parents' emotional views (e.g., if they worry about their child's talking)
 - Parents' linguistic responses (e.g., whether they ask simple questions)

The Impact of Stuttering on Preschool Children and Parents (ISPP); Langevin, Onslow & Packman, 2010

- A 20-question parent interview that asks:
- Child-related questions
 - Has stuttering ever caused any changes in *how easy it is for your child to talk* with other children? If you answered YES, was it easier or more difficult?
- Questions about playmates
 - Has your child ever been *teased* by other children because of his/her stuttering? If you answered YES, can you please describe what children do or did when they tease(d)?
- Parent-related questions
 - Has your child's stuttering ever *affected you emotionally*?

Predictive Cluttering Inventory -revised (PCI-r, Van Zaalen, Y., & Reichel, I., 2015)

Appendix A

PREDICTIVE CLUTTERING INVENTORY (PCI)-revised Original by Daly and Cantrell (2006); revised version by Van Zaalen et al., (2009)						
INSTRUCTIONS to SLP: Please respond to each description section below. Circle the number you believe is the common most descriptive of this person's cluttering during the day. Count the scores of the utilized items in each section.						
	5. Always	4. Almost Always	3. Frequently	2. Sometimes	1. Almost Never	0. Never
Section 1: Speech motor						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
Section 2: Language planning						
14						
15						
16						
17						
18						
19						
20						
Section 3: Attentiveness						
21						
22						
23						
24						
25						
26						
27						
28						
Section 4: Motor and planning (describe these symptoms compared to age level norms)						
29						
30						
31						
32						
33						
Section one: > 24 points in utilized items => possible cluttering						
Section two: utilized items provide supporting information on linguistic component in cluttering						
Section three and four provide additional information on personal communicative skills						

Cluster 1.: Speech planning	Cluster 2.: Disorganized language	Cluster 3.: Attentiveness
Lack of pauses between words and phrases; repetition of multi-syllabic words and phrases; irregular speech rate; speaks in spurts or bursts; telescopes or condenses words; initial loud voice trailing off to unintelligible murmur; oral diadochokinetic coordination below expected norm levels; co-existence of excessive disfluencies and stuttering; speech rate progressively increases (festinating).	Disorganized language increases as topic becomes more complex; poor language formulation; poor story-telling; sequencing problems many revisions; interjections; filler words; language is disorganized; confused wording; word-finding problems ; inappropriate topic introduction, maintenance, or termination; Improper linguistic structure; poor grammar; syntax errors	Does not recognize or respond to listener's visual or verbal feedback; does not repair or correct communication breakdowns; lack of awareness of own communication errors or problems; speech better under pressure; lack of effective self-monitoring skills; distractible; poor concentration; attention span problems

Table 3.: Distribution of items in cluster analysis.

Checklist for Identification of Cluttering; Daly & Burnett (1999; 1997)

- A scale based on a view of cluttering that incorporates both language and speech characteristics.
- Items include:
 - Language is disorganized
 - Difficulty following directions
 - Never very fluent

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*Appendix B: Checklist for Identification of Cluttering—Revised
(David A. Daly and Michelle L. Burnett, 1997)*

Client's Name _____ Date _____

Instructions: Please respond to each descriptive statement below. Your answer should reflect how accurately you believe the statement is true for the client.

Statement True for Client	Not at all	Just a little	Pretty much	Very much
1. Repeats words or phrases	0	1	2	3
2. Started talking late; onset of words and sentences delayed	0	1	2	3
3. Never very fluent; fluency disruptions started early	0	1	2	3
4. Language is disorganized; confused wording	0	1	2	3
5. Silent gaps or hesitations common	0	1	2	3
6. Interjections; many filler words	0	1	2	3
7. Little or no tension observed during disfluencies	0	1	2	3
8. Rapid rate (tachylalia) or irregular rate; speaks in spurts	0	1	2	3
9. Compulsive talker; verbose or tangential	0	1	2	3
10. Respiratory dysrhythmia; jerky breathing pattern	0	1	2	3
11. Slurred articulation (deletes, adds or distorts speech sounds)	0	1	2	3
12. Speech better under pressure (during periods of heightened attention)	0	1	2	3
13. Difficulty following directions; impatient/disinterested listener	0	1	2	3
14. Distractible, attention span problems, poor concentration	0	1	2	3
15. Poor language formulation; storytelling difficulty; trouble sequencing ideas	0	1	2	3
16. Demonstrates word-finding difficulties resembling anomia	0	1	2	3
17. Inappropriate pronoun referents; overuse of pronouns	0	1	2	3
18. Improper linguistic structure; poor grammar and syntax	0	1	2	3
19. Clumsy and uncoordinated, motor activities accelerated or hasty, impulsive	0	1	2	3
20. Reading disorder or difficulty reported or noted	0	1	2	3
21. Disintegrated and fractionated writing; poor motor control	0	1	2	3
22. Writing shows omission or transposition of letters, syllables, or words	0	1	2	3

Adaptation of Overall Assessment of the Speaker's Experience of Stuttering for People Who Clutter (OASEC)



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Childhood Stuttering Screening for Physicians

McGill et al, 2022; Yaruss & McGill, 2022

- A newly developed tool to allow physicians to rate stuttering and make reasonable referrals to SLPs.
- Ages 2-5.

CSS-P Childhood Stuttering Screening for Physicians

Many children exhibit stuttering behaviors in their speech between the ages of 2 and 5. While most children stop stuttering, some need treatment to help them develop their speech and communication abilities. Early intervention is critical for children who may continue stuttering. This screening examines risk factors for continued stuttering to help physicians identify children who should immediately be referred to a qualified speech-language pathologist (SLP) for evaluation and possible treatment.

Instructions: Screen children ages 2 to 5 whose caregivers express concern about speech disfluencies or stuttering.

- ◆ Refer all children older than age 5 who appear to be stuttering; no further screening is necessary.
- ◆ Ask a parent or caregiver the following questions. If they answer "Yes" to the first question (family history of stuttering), or "Yes" to 4 or more of the numbered questions, refer the child to a qualified SLP as soon as possible.
- ◆ Rescreen in 3 months if the parent or caregiver answers "Yes" to fewer than 4 of the numbered questions.

Child's Name: _____ Age: _____
Screening Date: _____ Birth Date: _____ MR#: _____

Do any members of the child's immediate or extended family stutter or have a history of stuttering?

No: CONTINUE with questions 1-7. Yes: REFER to SLP. No further screening necessary.

1. Are you concerned or worried about your child's stuttering? No Yes
2. Have you observed any of the following stuttering behaviors in your child's speech?
 - ◆ Repetitions of sounds or words ("I-I-I-like this" or "like-like this") No Yes
 - ◆ Prolongations of sounds ("lllllllike this") No Yes
 - ◆ Blocks, or moments when no sound comes out at all ("l----ike this") No Yes
3. Has it been 3 months or longer since your child first started stuttering? No Yes
4. Has the stuttering increased in frequency or severity over time? No Yes
5. Have you observed physical tension or tightness in your child's face or body during speaking? (e.g., tensing of the mouth, eyes, hands) No Yes
6. Does your child appear to be concerned or worried about speaking? (e.g., expressing frustration about talking, reacting strongly to stuttering) No Yes
7. Do you have any other concerns about your child's speech or language development? (e.g., difficulties with sound production, forming sentences) No Yes

Number of "Yes" responses to questions 1 through 7: _____

1-3: RE-SCREEN in 3 months. 4-9: REFER to Speech-Language Pathologist.



Summary

- It appears that there are tools available for almost all aspects of stuttering and how it impacts a person's environment.
- A skilled clinician may be able to develop these evaluation protocols on their own and can be supplemented by:
 - Clinician-developed tools
 - Personal interviews
- Established tools have the impact of:
 - Comparing to peers
 - Diminishing/adding to personal biases
- Some tools can be used across age groups, and may even be helpful when not normed for a specific group (to add information for tx.)

Applying these to a case

- Sample case:

- Tim T is a 15 year old, who just completed 9th grade. Tim was born with Spina Bifida. He was born with hydrocephalus, and later developed some seizures. He has since outgrown them. He went through significant physical and occupational therapy before he attended school, primarily to develop walking and other physical skills. He attended preschool for two years and then continued on with traditional school. His father reports that he has some “attention” issues. He attends a private school and maintains a “B” average, with a combination of A, B, and C grades. His parents report that he is quite social and very verbal. He is reported to be well-liked by everyone at his school, but does not have a lot of “close” friends. He does walk with a noticeable limp.

- According to parent report, Tim began to stutter at about 5. During this time, he was also getting significant physical therapy for his lower body. His stuttering has not improved over the years and at times it has gotten a bit worse. He has received stuttering therapy several times over the years, but his parents report that he will make some progress but it does not last. “Modified breathing” was the main technique taught. His father reports that currently his stuttering is quite severe. He says that it might take as long as 30 seconds to get out 10 or so words. His parents report that Tim is very verbal in nature.....almost overly so. There are no reports of stuttering in Tim’s family.

- Tim came to this evaluation through a self-referral from his father, Mr. Jonathan T. Mr. T was the source of the parent information used in this report. As noted earlier, Tim is quite social in many ways. In addition to his social life at school, Tim comes from a close family. His parents have been married for over 20 years and have three children. Tim is the middle of three children. He enjoys music/singing and video games, and is a very passionate football fan. His parents report that improving stuttering could have a significant positive impact on his life. Tim was reported to be “excited” about the evaluation and entered the situation very easily and without hesitation.

What tools should we use?

- For stuttering behaviors?
- For affective components?
- For cognitive components?
- What other information do we want to know???

What tools should we use?

- For stuttering behaviors?
 - SSI-4
- For affective components?
 - OASES-T
- For cognitive components?
 - OASES-T
- Other information?
 - Unhelpful thoughts
 - Self-stigma scale
 - Motivation to change
 - Situational difficulty
 - Locus of control
 - Peer reactions
 - ^Screening for other areas of difficulty/

Planning for therapy

- Able to take a pragmatic and comprehensive view of stuttering that includes:
 - Severity of stuttering
 - Attitudes that need to be addressed
 - Feelings that should be addressed
 - Feelings about themselves as related to stuttering
 - Readiness to change
- We believe that we must treat the ENTIRE PERSON and THEIR INDIVIDUAL NEEDS
- Granted these goals can be generated by a skilled and experienced clinician through interview and informal tools. This APPENDIX is to support the view of a complete and thorough evaluation to provide appropriate interventions for people who stutter, clutter or have other fluency issues.

Summary

- There are multiple tools that can be used with individuals that stutter, or are suspected of stuttering.
- Although many “experts” may know many of these tools, they still be relatively “new” for those that do not specialize.
- This appendix is meant to serve as a resource guide for those that seek to evaluate and plan therapies for those who stutter and/or clutter and significant others who may come into contact with them.

For a complete
reference
guide, scan the
QR code on this
slide.

In person only



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