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Overall Assessment of the Speaker's Experience of Stuttering

In Cooperation with Pearson

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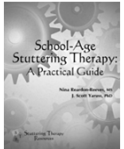
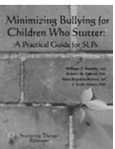
Overall Assessment of the Speaker's Experience of Stuttering (OASES)

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SpeechPathology.com and Pearson Assessments
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Disclosures

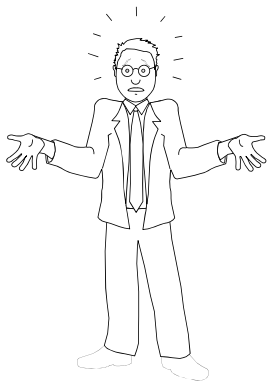
- Financial
 - *Overall Assessment of the Speaker's Experience of Stuttering (OASES)*, Pearson Assessments. (Royalties)
 - *School-Age Stuttering Therapy: A Practical Guide* and *Minimizing Bullying: A Guide for SLPs*, Stuttering Therapy Resources, Inc. (Royalties and Ownership.)
- Non-financial
 - Advisory board, *StutterTalk*
 - Volunteer  *National Stuttering Association*

Purpose

To provide an overview of the development, validation, and use of the ***Overall Assessment of the Speaker's Experience of Stuttering*** (OASES) for children, teens, and adults who stutter

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WHAT is
the
OASES?

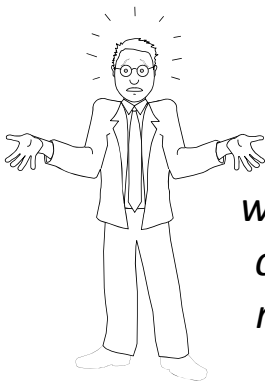
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Overall Assessment of the Speaker's Experience of Stuttering (OASES)

The OASES is a comprehensive measurement tool designed to document the entirety of the stuttering disorder *from the perspective of the person who stutters*

Outline

- The importance of comprehensive measurement
- The process of comprehensive measurement
- Development of the OASES
- Administration of the OASES
- Scoring of the OASES
- Interpretation of the OASES
- Examples and use of the OASES



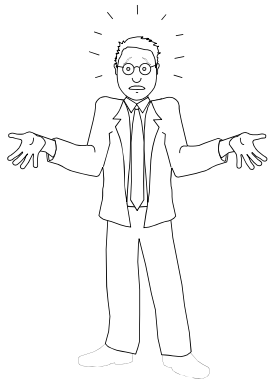
WHY
*would we
want to consider
comprehensive
measurement?*

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Most Important Fact #1



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WHAT
*specific
outcomes
should we
measure?*

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Int'l Classification of Functioning, Disability and Health

- **Body Function and Structure:** describes the major physiological and psychological functions of the body
- **Activities and Participation:** describes the major areas of people's daily lives
 - **Impairments** in Body Function and Structure can lead to **limitations** in a person's ability to perform activities or **restrictions** in the person's ability to participate in life



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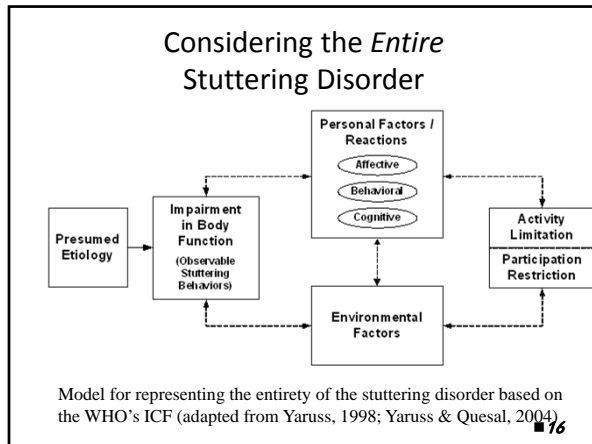
The Role of Context

- In stuttering, the link between impairment and the resulting negative consequences is largely mediated by the speaker's **reactions** to stuttering
 - **Affective:** Feelings, attitudes, emotions
 - **Behavioral:** Actions (Avoidance, tension, struggle)
 - **Cognitive:** Thought-processes, self-evaluation



- Finally, the reactions of those in the speaker's **environment** also play an important role for many

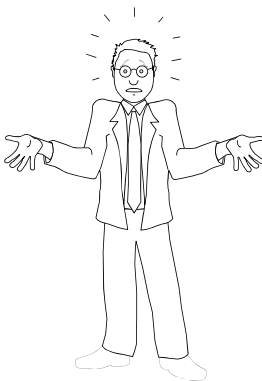
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The ASHA Scope of Practice

“Speech-language pathologists work to improve quality of life by reducing impairments in body functions and structures, activity limitations, participation restrictions, and barriers created by contextual factors...”

-- ASHA (2007) Scope of Practice for Speech-Language Pathologists



HOW

can we possibly hope to measure all that stuff?

Evaluating the *Entire* Disorder

- Since stuttering is a broad-based disorder, we must assess multiple aspects of the disorder in our evaluation (and treatment)
- To do this, we simply “follow the model...”
 - **Impairment:** Observable characteristics of speech
 - **Speaker’s Reactions:** Affective, Behavioral, Cognitive
 - **Environmental Reactions:** situational difficulties, real or perceived discrimination, etc.
 - **Activity Limitation / Participation Restriction:** Overall Impact of stuttering on speaker’s life

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Measuring Impairment (Observable Stuttering Behaviors)

- Most common measures include **frequency of disfluencies**, **type of disfluency**, and **severity**
 - Riley’s *Stuttering Severity Instrument* may be the most common measure in the field of stuttering
- **Stuttering behaviors are highly variable**
 - People may not stutter at all in some situations, so we must collect multiple speech samples
- **What you see is not always what you get**
 - People often try to hide their overt stuttering behaviors because of their embarrassment and anxiety



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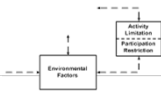
Measuring Reactions



- Numerous tools have been presented over the years aimed at examining the speaker’s “Communication Attitudes”
 - **S-Scale** (Erikson, 1969) ■ **S-24** (Andrews & Cutler, 1974)
 - **ICA** (Watson, 1988) ■ **PSI** (Woolf, 1967)
 - **SSS** (Riley et al., 2004) ■ **SSC** (Brutten & Shoemaker, 1974)
 - **SPP** (Silverman, 1980) ■ **SESAS** (Ornstein & Manning, 1985)
- With a few notable exceptions (e.g., Boberg & Kully, 1994), these instruments have not been widely used in treatment outcomes research (or even in daily clinical practice)

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Measuring The Rest of the Stuttering Disorder



- Fewer instruments have focused on the role of the environment or the negative impact of stuttering on the speaker's life
 - **WASSP** (Wright & Ayer, 2000) ■ **Crowe's Protocols** (2000)
 - *(I personally would like to see greater use of these instruments!)*
- Many attitudes scales examine environmental factors by considering different situations
 - This has led to criticism (Ulliana & Ingham, 1984) that many "attitudes" inventories simply reflect the speaker's *fluency* in different speaking situations

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Overall Assessment of the Speaker's Experience of Stuttering (OASES) (Varney &...

- A comprehensive instrument designed to evaluate the experience of the stuttering disorder *from the perspective of the speaker*
- Based directly on the WHO's ICF model so it meaningfully addresses the entirety of the stuttering disorder using terminology and strategies that are consistent with the rest of the field of rehabilitation

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Development of the OASES

- Developed through an iterative process of data collection and analysis with more than **500** children, adolescents, and adults who stutter to ensure a high degree of reliability and validity
- Designed to provide an "impact score" and "impact rating" reflecting the severity of the stuttering *disorder*
 - The impact score does not simply reflect the observable stuttering behaviors; it reflects the **overall experience of stuttering**

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The Early Versions

- To begin, three preliminary instruments were created based on existing literature, clinical experience, and input from fellow SLPs and people who stutter
 - At first, we focused on personal reactions and activity/participation components
 - *Speaker's Reactions to Stuttering*
 - *Functional Communication and Stuttering*
 - *Quality of Life and Stuttering*
 - Ultimately, these three trial instruments were refined and combined into a single tool.

Step by Step by Step

- Development involved 3 primary strategies:
 - Compilation of a large list of *possible items* for each of the constructs we sought to measure (reactions, functional communication, quality of life)
 - Refinement of items based on *focus groups* of people who stutter, stuttering specialists
 - *Pilot testing* of items, scales, wording, etc., and repeated revision of the test based on results
- The first completed version of the OASES for adults (OASES-A) was published in *JFD* in 2006 and by Pearson Assessments (in both English and Spanish) in 2008

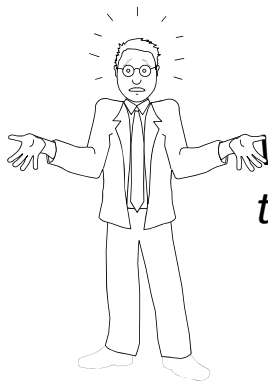
Structure of the OASES-A

- Four sections, each of which is closely related to the different parts of the ICF Model
 - **Section I: General Information about Stuttering**
 - Speaker's perception of the **Impairment** and general knowledge and perception of the stuttering disorder
 - **Section II: Speaker's Affective, Behavioral, and Cognitive Reactions**
 - **Section III: Communication in Daily Situations**
 - Activity Limitation / Environmental Factors
 - **Section IV: Impact of Stuttering on Quality of Life**
 - Participation Restriction / Environmental Factors

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Structure of the OASES-A

- In total, the OASES-A consists of 100 items
 - Section 1 (General Information): **20 items**
 - Section II (Reactions to Stuttering): **30 items**
 - Section III (Comm. in Daily Situations): **25 items**
 - Section IV (Quality of Life): **25 items**
- Each item is scored on a 5-point scale
 - In all cases, higher scores indicate greater negative impact of stuttering, though sometimes, a neutral answer (3) is an acceptable outcome



*What about
the Children
?*

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OASES for Children

- In 2005, a trial version of the OASES was adapted for children ages 7 to 17
 - It was originally called *ACES: Assessment of the Child's Experience of Stuttering*
- The ACES was developed in the same way as the original adult version
 - Development of a potential item pool
 - Refinement based on focus groups
 - Item testing, validation, and revision

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Children vs. Teenagers

- It rapidly became clear that the issues facing school-age children were different from the issues facing teenagers
 - The ACES was split into two tools and renamed for consistency with the OASES-A:
 - OASES-S (for school-age children, ages 7-12)
 - OASES-T (for teenagers, ages 13-17)
- Both tools were based on the ICF and use the same basic structure as the OASES-A

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OASES-S and OASES-T

- Both tools were shortened and focused specifically on issues appropriate for the target age groups:
 - OASES-S contains 60 items addressing issues such as asking questions or reading out loud in class, participating in age-appropriate social activities, and interacting with peers
 - OASES-T contains 80 items addressing issues such as participating in academic and social activities, preparing for college or a career, etc.

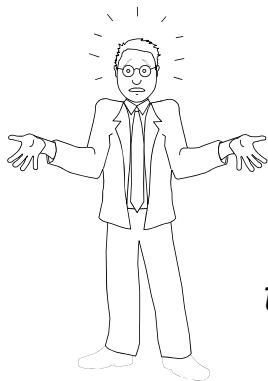
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Interpretation of OASES

- Regardless of the age group being assessed, the OASES can be used to determine the **overall impact of their stuttering disorder**
- Administration results in a set of **impact scores** and **impact ratings**, which can be calculated for each section or for the test as a whole

Impact Score	Impact Rating
1.00 – 1.49	Mild
1.50 – 2.24	Mild-to-Moderate
2.25 – 3.99	Moderate
3.00 – 3.74	Moderate-to-Severe
3.75 – 5.00	Severe

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How Do I Use the OASES?

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Administration / Scoring of the OASES

- All three versions of the OASES are paper-and-pencil measures that typically require less than 20 minutes for clients to complete and less than 5 minutes for clinicians to score
 - The OASES is not a timed test, so clients can have as much time as they need to complete it.
- All of the instructions for completing the OASES are printed on the record forms, but it is helpful to review the instructions with your clients before they begin.

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Administration Guidelines

- During development of the OASES, great care was taken to ensure that the questions are easy to read and understand
- Still, sometimes clients may have questions about individual items
- **NOTE: You ARE permitted to answer clients' questions about individual items and to provide examples or explanations to help them understand the questions**

Administration Guidelines: *All Items Need a Response*

- **Not all items apply to all individuals.**
 - For example, for the OASES-A, not all clients will be married or have children.
- Items that may not apply to everybody have a “not applicable” option.
 - **All other items should have a response**
- **This is different from the 2006 and 2008 versions**
 - Refinements were based on research conducted by Teva Pharmaceuticals and RTI Health Solutions

Administration Guidelines: Skipped Items

- It a client skips more than 2 items in a section, the scores for the test may not be valid.
 - Sometimes, clients may skip a section or a page accidentally. If this happens, you can direct the client’s attention to the skipped page and ask them to complete the missing items.
 - If you are unable to score a section because of skipped items, you can still score the other sections *individually*. In this case, however, you cannot use the overall scores or ratings.

Scoring Procedures

- For each section, scoring involves 3 steps:
 - 1: Sum the speaker’s scores in that section (A)
 - 2: Count the number of items skipped or N/A and subtract that number from the total number of items in the section to obtain the total number of items answered (B)
(There shouldn’t be any skipped items!)
 - 3: Divide the total score (A) by the number of items answered (B) to determine the **impact score** for that section

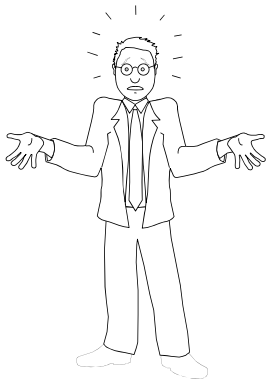
Scoring Procedures

- For the overall test, scoring procedures are the same as for the individual sections:
 - Sum the scores from each section to get the total score (A)
 - Count the total number of items answered across the entire test (B)
 - Divide the total score (A) by the number of items answered (B) to determine the **impact score** for the entire test

Impact Scores / Impact Ratings

- Once the impact scores are calculated, obtain the impact rating using the following table:

Impact Score	Impact Rating
1.00 – 1.49	Mild
1.50 – 2.24	Mild-to-Moderate
2.25 – 3.99	Moderate
3.00 – 3.74	Moderate-to-Severe
3.75 – 5.00	Severe



***So what
can we
DO
with all
these data?***

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Interpreting the OASES

- OASES results can be interpreted at 3 levels
 - Overall Impact Rating for the test as a whole
 - Impact Ratings for each of the 4 sections
 - Responses to each of the individual items
- Each level of interpretation provides useful information to help clinicians:
 - Diagnose individuals who stutter
 - Prepare individualized treatment plans
 - Document changes in the experience of stuttering before and after treatment

Interpreting the OASES

- The OASES product manual contains detailed *interpretation guides* that describe likely characteristics of individuals with different impact ratings for each of the four sections, as well as for the test as a whole.
 - In total, there are 25 interpretive paragraphs
- The next slide shows an example for a speaker who scores an overall impact rating of “Moderate” (2.25 – 2.99)

Views self as having difficulty speaking fluently or communicating easily in many speaking situations. Likely to exhibit notable physical tension and some struggle during stuttering and occasionally during fluent speech. This tension sometimes interferes with communication and prevents the speaker from saying what he or she wants to say. Exhibits negative affective and cognitive reactions to stuttering and is concerned about the reactions of others. Avoids some speaking situations and changes words to hide stuttering. Experiences limitations in the ability to communicate in key situations and may sometimes have difficulty getting his or her point across. Is likely to take stuttering into account when deciding whether to take part in daily activities, talking to others, and when making decisions. Has some difficulty functioning and is concerned about how stuttering interferes with his or her goals.

Using the OASES to support *Daily Clinical Practice*

- **To support the understanding of stuttering**
 - Because the OASES is based on the experiences of hundreds of people who stutter, clinicians can use the OASES to better understand the nature of the stuttering disorder
- **As a treatment *planning & evaluation* tool**
 - Clinicians can use the OASES to ensure that they work toward meaningful changes in relevant aspects of the speaker's experience of stuttering

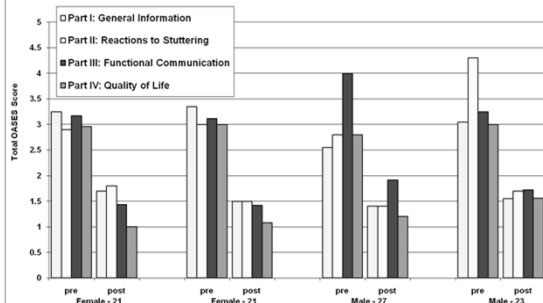
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Using the OASES to support *Treatment Outcomes Research*

- OASES can also be used in treatment outcomes research and to support the principles of evidence-based practice
- *Sensitivity of the OASES to changes observed in treatment with adults who stutter has been shown in several studies presented at ASHA, publications, and other ongoing research*

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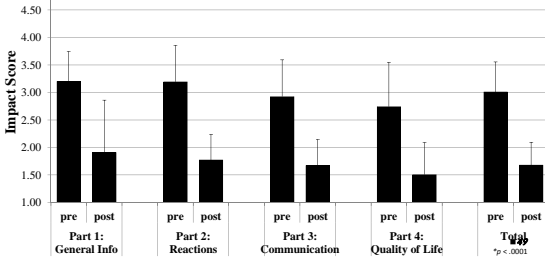
Using the OASES to support *Treatment Outcomes Research*



From Yaruss & Quesal (2004), *International Fluency Association* and Yaruss & Quesal (2006), *ASHA*

Using the OASES to support Treatment Outcomes Research

Preliminary results from an ongoing study of 44 people
before and **after** two comprehensive treatment
programs



Looking to the Future

- Research on the reliability and validity of the OASES is ongoing
 - Studies are examining the sensitivity of the OASES to changes in treatment, the difference between people who stutter and people who do not stutter, and the differences between people from different cultures.
- **Also...the OASES has been translated into approximately 15 languages worldwide and validation of these translations is ongoing**



Conclusion

- Not only it is possible to consider multiple outcomes of stuttering treatment, it is **necessary**, based on the tenets of EBP
- By basing our measurement upon a widely used framework for understanding human health experience, we ensure **comprehensive** documentation of treatment outcomes
- Without such information, it is impossible to judge the success of treatment **from the perspective of the individual who stutters**

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Conclusion

- Using the OASES, we can get comprehensive, reliable information about the entirety of the stuttering disorder
- This information can help us improve our diagnostic evaluations, treatment planning, and treatment outcomes research
- The data we collect provide the foundation for our implementation of evidence-based practice

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Questions? Comments?

Please contact me!



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