

## School-Age Stuttering: A Practical Guide to Assessment and Treatment

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### Disclosures Megann McGill, PhD, CCC-SLP

- Financial:
  - Employed as an assistant professor in Speech & Hearing Sciences at Portland State University which paid for travel to OSHA
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- Non-financial:
  - Editorial review board member for *Special Interest Group 4 - Perspectives*
  - ASHA's Fluency SIG-4 member

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### Disclosure Glenn Weybright, MS, CCC-SLP

- Glenn Weybright is a person who stutters
- He was a consultant and appeared on screen in the 2015 documentary film *The Way We Talk*. He received no financial compensation for his work and receives no income from sales and streaming of the film.

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## Disclosures Andy McMillin, MA, CCC-SLP

- Financial
  - Salary from Portland State University
- Non-financial
  - Past-president of OSHA
  - Currently on OSHA Board of Directors

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## Why are we talking about stuttering?

- Many speech-language pathologists report feeling uncomfortable evaluating and treating children who stutter.
- Stuttering ranks lowest in rankings of disorders that SLPs prefer to treat.

(Yaruss & Quesal, 2002)

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## Stuttering: Basic Facts

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### What is stuttering?

Stuttering is a neurophysiological disorder characterized by various involuntary speech behaviors that interfere with the forward flow of speech.

(NIH, 2016)

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### Stuttering is NOT...

- A psychological disorder
- Something that happens because the person is nervous, anxious, or less intelligent
- A behavior that a child will outgrow if the parent ignores it
- A disorder that can be easily remediated

(Byrd, 2015)

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### Age span

- Onset usually around 3 y/o
- Probability of onset of stuttering decreases with age
- Stuttering can last throughout the life



(Guitar, 2014)

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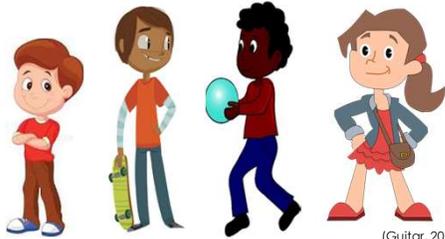
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### Gender

Ratio of male to female is 3-4 to 1



(Guitar, 2014)

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### Incidence

Incidence is the % of the population who have stuttered at any point during their life

5%

(Guitar, 2014)

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### Prevalence

Prevalence is the % of individuals who stutter at any given point in time (how many people stutter right now)

1%

(Guitar, 2014)

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What does the difference between the prevalence and incidence numbers tell us about recovery?

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### Recovery

- About 75% of young children who stutter will spontaneously recover (ASHA, 2016)
- Probability of recovery is highest from 6-36 months post onset
  - Majority of CWS recover within 12-24 months post onset

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### Risk factors for persistence

- Family history
- Gender
- Age of onset
- Trend of stuttering frequency/severity
- Duration since onset
- Duration of stuttering moments
- ASP, ISP disfluencies
- Concomitant disorders

(Yairi & Ambrose, 1992; 1999; 2005)

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### Variability of stuttering

"If you have met one person who stutters, you have met one person who stutters." –Glenn Weybright

Stuttering is *highly* variable both across people who stutter and within a person who stutters.

\*This variability has implications for assessment and treatment

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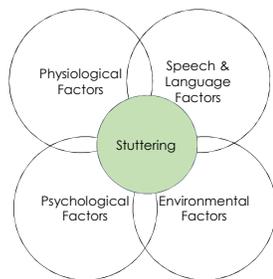
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### Etiology



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### Multifactorial model of stuttering

**Physiological Factors**

- Genetics
- Neurological considerations
- Speech motor skills
- Gender

**Environmental Factors**

- Communicative situations

**Speech and Language Factors**

- Language skills
- Phonological skills
- Linguistic context

**Psychological Factors**

- Child's temperament
- Child's awareness of stuttering

(Rademacher & Reichardt, 2016)

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Assessment

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Assessment

- Purposes
  - Determine whether the student stutters (often this is already answered for us)
  - Describe patterns of disfluency and the child's reactions/perceptions of his/her stuttering
  - Determine therapy plan based on the needs of the student

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*"A comprehensive assessment means more than just a frequency count"*  
-Yaruss (2014)

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### Assessment protocol

- Interviews and case history
- Feelings and attitudes evaluations
- Speech samples (variety of contexts)
  - Disfluency count
  - Speech rate
- Speech-language testing

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### 25 parent interview questions

- 1) What do you hope to learn/gain from this speech evaluation?
- 2) Describe your child's speech. Show me.
- 3) When did his/her stuttering begin?
- 4) What do you think might be the cause?
- 5) Has it changed since you first noticed it? How?
- 6) Does it come and go? When?
- 7) Are there times when it is better or worse? Certain sounds, situations, people, times of day, etc.?
- 8) Do you talk about your child's stuttering with him/her?
- 9) What do you do when he/she is having difficulty? Do you do anything to try to help? Does it help?
- 10) Is your child aware of his/her disfluencies? Always, sometimes, never? What makes you think so?
- 11) If aware, does he/she seem concerned? Ashamed, embarrassed? Why do you think so? Can you provide any examples?

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### 25 parent interview questions

- 12) Does your child react to his/her speech in any way? How?
- 13) Does he/she ever seem to avoid speech? Situations? Words? People? Topics? Sounds?
- 14) How do others react to his/her speech?
- 15) Has he/she had any previous evaluations/ therapy? What was his/her reaction to it? How did you feel about it? Did it seem to help?
- 16) What have you been told about stuttering?
- 17) Do you have any other concerns about your child's development?
- 18) Describe a typical day in the life of your child.
- 19) Describe for me the amount of talking that is done in your family.

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### 25 parent interview questions

- 20) How does she/he get along with siblings, parents, etc.? How does he/she interact with other children?
- 21) Does he/she like to talk? What does he/she like to talk about? To whom does he/she like to talk the most? The least?
- 22) What kinds of things do you do together as a family?
- 23) How has stuttering impacted your child's social activities? Educational activities?
- 24) How would your child be different if he/she did not stutter?
- 25) If you could have three wishes come true for your child what would they be?

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### Student interview questions

- 1) Do you like talking?
- 2) Who do you like talking to best?
- 3) Is talking easy or difficult for you?
- 4) If you could change something about your talking, what would it be?
- 5) Do you know why you are here today?
- 6) What does your speech sound like?
- 7) When does stuttering happen?
- 8) What do you do when it happens?
- 9) Do you know why it happens?
- 10) Has anyone ever said anything to you about your speech?
- 11) Is there anything you can do to make it better/easier?
- 12) Does it ever make you feel... happy, sad, mad, frustrated?
- 13) If you could have three wishes come true, what would they be?

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### Teacher interview questions

- 1) Does the student repeat parts of words?
- 2) Does she/he repeat sounds more than once every 8 or 10 sentences?
- 3) Does she/he repeat the same sound more than once?
- 4) How long have you noticed this?
- 5) Does she/he sometimes get stuck so badly that no sound at all comes out, with his mouth wide open?
- 6) Does he express frustration or embarrassment when he has trouble with a word?
- 7) Please describe his speech and nonspeech behavior when...
  - a. He/she answers question in class
  - b. He/she speaks to you one on one
  - c. He/she reads aloud
- 8) How do you respond if/whenshe/ he is having difficulty speaking?
- 9) How do the other students respond?
- 10) What do you think is the cause of his stuttering?
- 11) What have you discussed about his stuttering with his parents?
- 12) What have you discussed about stuttering with him?

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## % SS ≠ adverse impact

- Some people may stutter frequently but experience minimal adverse impact
  - Some people can stutter and still say anything they want and do anything they want. They just stutter while they're doing it!
- Some people may stutter infrequently but experience significant problems in their lives
  - This is particularly true with "covert" stuttering
  - People who stutter covertly may be practically unable to communicate, even though they may produce few observable disfluencies
  - Reading aloud is particularly useful for "catching" children who stutter covertly and try to hide their stuttering
  - **So, we can't just assess frequency/severity of disfluencies.**

(Yaruss, 2014)

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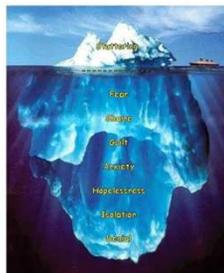
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## Iceberg Analogy of Stuttering



(Sheehan, 1970)

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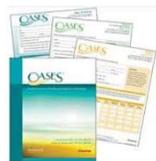
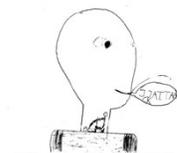
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## Feelings and attitudes

- Parent and child interview
- Overall Assessment of the Speaker's Experience of Stuttering (OASES); Assessment of the Child's Experience of Stuttering (ACES)
- Drawing and hands exercise
- Hierarchy




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## Attitude: OASES

- 100 items in 4 sections, each on a 5-point scale
- Ages 7-12; 13-18; 18+
- Sections relate to the International Classification of Functioning, Disability and Health (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:** Affective, Behavioral, Cognitive Reactions
  - **Section III:** Communication in Daily Situations
    - Activity Limitation/Environmental Factors
  - **Section IV:** Impact of Stuttering on Quality of Life

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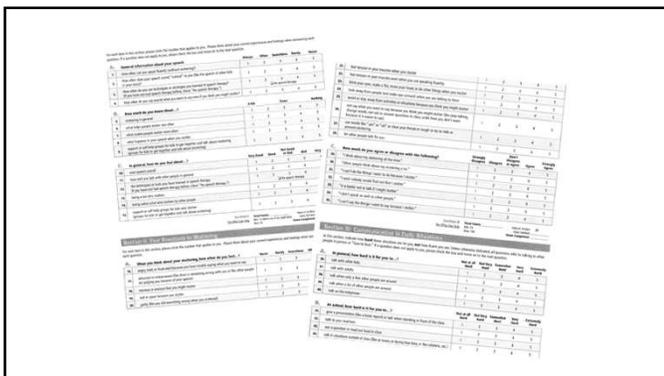
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## Attitude: OASES

- Can be used as an evaluation measure and a planning 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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### Attitude: Drawing

- Instructions to students:
- Draw a picture of what it feels like to stutter.
  - Draw a picture of what it feels like to talk.
  - How do you "see" your stuttering? Draw a picture on this piece of paper that shows how you feel about your stuttering. Write down what your picture means. (Chemla & Reardon, 2016)

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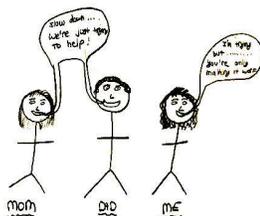
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### Attitude: Drawing



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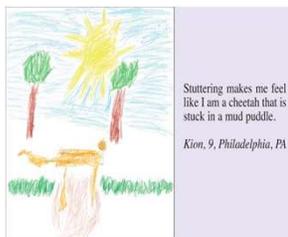
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### Attitude: Drawing



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Attitude: Drawing



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Attitude: Drawing



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Attitude: Drawing



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Attitude: *Drawing*



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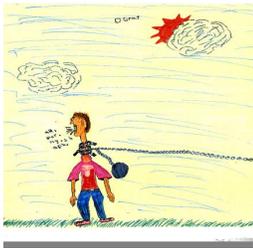
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Attitude: *Drawing*



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Attitude: *Drawing*



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### Attitude: Hands

Instructions to students:

- Trace your hands on this sheet of paper.
- On your left hand, list the things that you like about yourself on each finger.
- On your right hand, list the things that you may not like about yourself.

(Chmela & Reardon, 2016)

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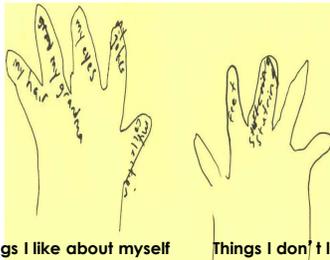
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### Attitude: Hands



Things I like about myself

Things I don't like

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### Attitude: Hands



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### Attitude: Hands



**EXERCISE SUMMARY**  
 Blake, who rarely exhibited negative emotions, included it on her negative hand. She had never seen her father as angry, yet she used it as one of her primary negative attributes. This suggested she had great sympathy about her father.

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### Hierarchy

Information can come from parent interview, teacher interview, student interview and hierarchical drawing

*Always be careful to use client's terminology not your own*

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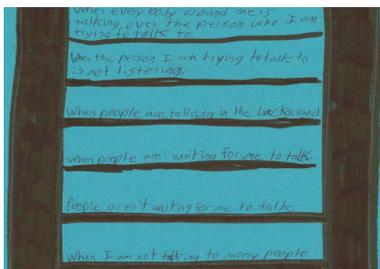
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### Hierarchy: Ladder




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## Hierarchy: Ladder




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## Hierarchy: Ladder




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## Speech samples

- Stuttering is variable, so...
- You will need to collect data in more than one situation
  - You will need to collect enough data to get a representative sample of the child's speech behavior

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### Speech sample contexts

- Where/when might you collect speech samples with your students?

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### Reading

- The Stuttering Severity Instrument (SSI) provides reading passages according to grade level
- Reading does not allow for substitution of words

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### Conversational interactions

- Clinician
- Parents and/or teacher
- Unfamiliar person
- More than one environment (e.g., school vs home, playground vs classroom)
- If necessary, more than one interactive style (e.g., disruptive vs nondisruptive)

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## Telephone

- Mainly done with older school age and adults
  - Unless reported as a problem for younger children
- Scripted vs. unscripted



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## What are we analyzing in these speech samples?

- Speech rate
- Frequency of disfluencies
- Duration of stuttering moments
- Clustering of disfluencies
- Iterations
- Physical concomitants/secondary behaviors

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## Disfluency count

- What is it?
  - A measure of **frequency** of **types** of disfluencies
- Why do we use it?
  - To collect data to determine **eligibility** & to measure **progress**



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### Instances of stuttering (STGs)

- Sound or syllable repetition (SSR)
  - S-s-s-susan is my mother.
- Whole word repetition (WWR)
  - My-my-my best friend is Johnny.
- Audible sound prolongation (ASP)
  - Shhhhhhe is my teacher.
- Inaudible sound prolongation/block (ISP)
  - (B)---but I don't want to.

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### Typical disfluencies (NonSTGs)

- Phrase repetitions (PR)
  - I like I like pink.
- Revisions (REV)
  - She went she ran to the car.
- Interjection (INTJ)
  - Um, uh, like

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### Frequency

- Divide the number of instances of stuttering by the number of syllables in the sample X100 = %SS
- Subtract this number from 100 to obtain % fluent speech

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### Duration

- Measurement of the length of the stuttering moment

Wha-wha-wha-what




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### Clustering

- Disfluencies that occur adjacent to one another
- Across words in a phrase
  - He-he i--s going home.
- Within a word
  - Wha-wha-what-what-w-----hat is that?

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### Iterations

- Number of times a word/sound is repeated

I-I-I am going (N=3)  
 He-He-Henry already left (N=2)  
 Ca-can I go with you (N= ?)

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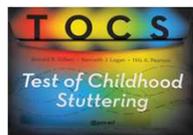
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## Assessment tools

- The *Stuttering Severity Instrument-Fourth Edition (SSI-4; Riley, 2009)* examines conversational and reading samples. Severity based on frequency, duration, and observed physical concomitants
- The *Test of Childhood Stuttering (TOCS; Gillam, Logan, & Pearson, 2009)* for ages 4 to 12 examines four different speaking situations




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## Assessment tools: SSI

Frequency		SSE Reading Table or Stuttering (SSE) and half		Stuttering Table	
SSI	SSI	SSI	SSI	SSI	SSI
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9
10	10	10	10	10	10
11	11	11	11	11	11
12	12	12	12	12	12
13	13	13	13	13	13
14	14	14	14	14	14
15	15	15	15	15	15
16	16	16	16	16	16
17	17	17	17	17	17
18	18	18	18	18	18
19	19	19	19	19	19
20	20	20	20	20	20
21	21	21	21	21	21
22	22	22	22	22	22
23	23	23	23	23	23
24	24	24	24	24	24
25	25	25	25	25	25
26	26	26	26	26	26
27	27	27	27	27	27
28	28	28	28	28	28
29	29	29	29	29	29
30	30	30	30	30	30
31	31	31	31	31	31
32	32	32	32	32	32
33	33	33	33	33	33
34	34	34	34	34	34
35	35	35	35	35	35
36	36	36	36	36	36
37	37	37	37	37	37
38	38	38	38	38	38
39	39	39	39	39	39
40	40	40	40	40	40
41	41	41	41	41	41
42	42	42	42	42	42
43	43	43	43	43	43
44	44	44	44	44	44
45	45	45	45	45	45
46	46	46	46	46	46
47	47	47	47	47	47
48	48	48	48	48	48
49	49	49	49	49	49
50	50	50	50	50	50

Frequency Score (part 1 - 2) =

Average length of utterance (ALU) is the number of words in the longest utterance produced in the session.

Duration	Scale Score
1-2 sec	1
3-4 sec	2
5-7 sec	3
8-10 sec	4
11-15 sec	5
16-20 sec	6
21-25 sec	7
26-30 sec	8
31-35 sec	9
36-40 sec	10
41-45 sec	11
46-50 sec	12

Duration Score =

Physical Concomitants

Enduring Scale	Stuttering Severity	Physical Concomitants
1 = none	1 = none	1 = none
2 = mild	2 = mild	2 = mild
3 = moderate	3 = moderate	3 = moderate
4 = severe	4 = severe	4 = severe

Total Score = Frequency Score + Duration Score + Physical Concomitants Score =  Possible Severity =

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## Speech-language testing

- Speech sounds
  - Approximately 40% of CWS also present with speech sound disorders (Luoko, Edwards, & Conture, 1990)
- Receptive/expressive language
  - 15-30% of CWS also present with language disorders (Blood, Ridenour, Qualls, & Hammer, 2003)

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### CLD assessment considerations

- Bilingualism is NOT a risk factor for stuttering (Byrd, Watson, Bedore, Mullis, 2015)
- It is unlikely that a bilingual child will stutter in one language and not the other (e.g., Van Borsel, Maes, & Foulon, 2001)
  - Gather speech samples in all languages!
- English behavioral stuttering assessment tools (e.g., SSI) may be used in a descriptive manner; monolingual norms
  - Describe STG types, patterns, iterations, clustering
- Bilingual children may use code-switching to avoid stuttering
  - Ask them about avoidance or covert behaviors
- Parent report/concern is key (Byrd et al., 2015)
  - Talk to parents about how their child's speech compares to other children his/her age in their community

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### Treatment

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### Presentation purpose

- To present current information, best practices, and clinical experience regarding a comprehensive approach to treating students who stutter

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### A comprehensive approach

- Teaches strategies for dealing with negative thoughts and emotions
- Teaches tools to manage stuttering
- Encourages openness about stuttering

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### A comprehensive approach

- Yaruss, J.S., Coleman, C., Quesal, R. (2012). Stuttering in school-age children: a comprehensive approach to treatment. *Language, Speech, and Hearing Services in Schools*, 43, 536-548.

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### Desired characteristics for SLPs treating children who stutter

- A genuine interest in stuttering and in students who stutter
- A willingness to take risks, to put stuttering in one's own mouth
- A willingness to treat each student as an individual, a willingness to customize a treatment program
- A willingness to be open about one's own challenges
- The SLP is trustworthy and has the ability to inspire

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### Beyond the skill set: three intangibles

- Relationship
- Vulnerability
- Gratitude

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### Is stuttering ok?

- Yes, of course!
- Are you bad when you stutter? No, of course not
- The child has to know that when he stutters the SLP will not be upset or disappointed in him
- But: we may be able to make stuttering less annoying and less interfering by reducing the amount and by reducing the severity

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### Basic assumptions

- Stuttering is a result of neurological differences in combination with developmental and environmental factors
- Once past the preschool years, stuttering seems to become entrenched and in some form or another may be with the person permanently.

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### Implication

For school agers, making the stuttering "go away" and replacing it with spontaneous fluency never to stutter again is probably off the table as THE MAIN GOAL in treatment because it is unlikely

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### And that means...

- Treatment becomes doable: we can develop and implement achievable and helpful treatment goals
- We can do what we do best: teach attitude and speech strategies, encourage their use, and support the person and family

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### Treating people who stutter

- Speech therapy for people who stutter: the process of learning to change the way we manage our stuttering.
- From an article in the July 2016 issue of the ASHA Leader, "The High Cost of Stuttering," by Patricia Zebrowski, PhD, Professor in the Department of Communication Sciences and Disorders at the University of Iowa.

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### Weybright: two goals

- One, to lead the client to view stuttering in a different light:
  - To see it as others do (almost always as less of a problem)
  - To see it as a speaking difference and not a barrier to communication
  - To see it as less than the most important thing in one's life, to move it to a lower rung on the ladder (Thanks Portland NSAer Jim)
- Two, to reduce the amount of stuttering or the degree of effort required in stuttering

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### Example: School-based annual goal (attitudes and openness)

- Student will increase her knowledge of stuttering and the speech mechanism in order to advocate for herself and educate others about speech
- Objective: Student will accurately label and describe the function of parts of the speech mechanism with 90 per cent accuracy when using a visual in order to increase her understanding of stuttering

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### Example objectives (attitudes and emotions)

- Student will formulate an "FYI" statement and share with three trusted adults in order to educate others about stuttering and to increase self advocacy skills
- Student will identify three "feared sounds" and identify the point of constriction for those sounds

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### Example: School-based annual goal (speech)

- Student will use fluency shaping and stuttering modification strategies in order to reduce the number of disfluencies in her speech in chosen speaking situations

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### Example objectives (speech)

- Student will demonstrate the ability to reduce the number of disfluencies in her speech by using easy onset at the beginning of sentences
- Student will demonstrate the ability to reduce the number of disfluencies in her speech by using cancellation when she is experiencing a block or prolongation

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### Treatment

- Planting the seed
- Encouraging its growth
- Harvesting
- Our work with the client may encompass only one or two of these areas

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### Working with attitudes and emotions, school-age children

- In general, children who stutter are likely to develop negative attitudes and emotions toward their stuttering after age eight
- BUT: there will be a whole range of attitudes toward the stuttering, from finding it mildly annoying to detesting it, and from not caring if words come out bumpy to avoiding stuttering at all costs. AND, these attitudes may not be easily voiced

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### Treatment: tools for managing thoughts and emotions

- Disclosure (FYling)
- Cognitive behavior therapy
- Mindfulness
- Facing fear
- The three zones
- Kristin Chemela and Nina Reardon Reeves, *The School-Age Child Who Stutters: Working Effectively with Attitudes and Emotions* (Stuttering Foundation, 2001)

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### Disclosure

- Why disclose?
  - Takes the pressure to hide stuttering off, which often produces less stuttering
  - Lets your listener(s) relax
  - Lets you be yourself

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### What is cognitive therapy?

- Cognitive therapy is an approach that encourages people to tune in to the automatic thoughts we all have, challenge them if necessary, and reap the results in anxiety reduction
- The goal is anxiety reduction

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### The Cognitive Therapy Model

- The cognitive model or cycle:
  - Unrealistic thoughts...lead to
  - Feelings like anxiety or fear... which lead to
  - Physiological responses... which lead to
  - Safety behaviors

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### Using cognitive therapy with children

- Used with children as young as seven years, although nine and older may do best
- Developmental issues: is the child able to
  - Think about thinking and think in the abstract
  - Identify thoughts and feelings
  - Generate alternative possibilities

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### Mindfulness

- Purposeful and non-judgmental attention to, and awareness of, the moment
  - Focus on your breathing
  - When a distracting thought intrudes, gently bring your attention back to your breathing
  - Scott Palasik, PhD, SLP, PWS begins every speech treatment session for students who stutter with a focus on six breaths
- Dealing with negative thoughts and emotions in a mindful way: recognize them, even label them, and then.... let them pass by

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### Brave and courageous

Facing fear and doing it anyway  
Acknowledge fear, put it in the back seat and keep going.  
SLP, remember to validate feelings and applaud bravery

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### The three zones

- Comfort zone
- Learning, stretch zone
- Panic zone

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### Chmela & Reardon-Reeves: Working with attitudes and emotions

- Question: Why should we assess and work with attitudes and emotions toward stuttering?
- Answer: Negative feelings or inaccurate beliefs children in therapy had about stuttering were often the reasons for lack of transfer or for relapse

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### Two other important tools for dealing with attitudes and openness

- Moving toward openness about stuttering by:
  - Meeting other students, teens, and adults who stutter
  - When ready, daring to speak to individuals and groups about stuttering and learning to see "the problem" in a different light.

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### Tools for treating speech

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### A seven step treatment outline

- Introduction
- Exploration of speech
- Exploration of stuttering
- Facing the stuttering
- Modification
  - Speech
  - Thoughts and emotions
- Stabilization and transfer
- Maintenance

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### Introduction

- Explain what stuttering is, give facts and demonstrate in a matter-of-fact, calm manner
- Explain what will happen in therapy
- Develop goals
  - Speech
  - Openness
  - Thoughts and emotions

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### Step two: awareness and exploration of normal speech

- Learn how sounds are made
- Make a speech machine/draw a speech man (girl) and label parts
- Explore and teach sounds related to each speech helper
- Focus in depth on the vocal folds
- Determine if the student has predictably hard sounds and zero in on how these are made
- Use anatomy books and materials as appropriate
- Foster an air of scientific curiosity and interest; collect interesting "specimens."
- Focus on the normal flow of speech

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### Step three: awareness and exploration of stuttering

- The goal is to move the student to describe his own way of bumping
- Begin perhaps by teaching the core behaviors and describe what he does
- Next, the SLP introduces some bumping in her own speech and the two play bump tag
- At some point look at videos of students who stutter (the Stuttering Foundation DVD *Stuttering For Kids By Kids* has good examples of stuttering). Be calm, matter of fact, and interested.

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### Step four: facing the stuttering

- Discuss stuttering openly
- Begin voluntary stuttering when the student is ready
- Discuss and begin disclosure (FYI ing)
- Bring a friend to speech therapy
- Consider a classroom presentation with the SLP; start by writing a disclosure script and making a short video

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### Step five: modification

- Tools for speech: Fluency shaping
- Tools for speech: Stuttering modification
- Tools for speech: An integrated approach
- Tools for dealing with thoughts and emotions

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### Step six: stabilization and transfer

- Field trips
- Involving the classroom teacher
- Involving the parents

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### Step seven: Maintenance

- Meeting a peer or adult who stutters
- Becoming your own speech therapist

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### Customizing therapy: where to start with speech tools

- Introduce the student to as many speech tools as possible.
- There will be one or two that resonate with the student, perhaps just a bit. Start here.
- There will be one or two speech tools the student hates with passion. Don't go here.

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### Fluency shaping

- Teach a new way of talking
  - Take apart the movements of speech and rebuild them beginning with vowels and moving eventually to conversation
- Do not accept stuttering – eliminate it
- No direct work on fears or avoidances
- Goal is controlled fluency

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### Stuttering modification

- Assumes there may always be some stuttering
- Modify the moment of stuttering
- Deal with avoidances and fears
- Reduce and hopefully eliminate secondary behaviors
- Acceptable stuttering is an appropriate goal

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### An integrated approach

- Combines elements of fluency shaping and stuttering modification: teach fluency targets but deal with stuttering moments

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### The use of tools: A word about terminology

- Facilitate ownership of the method by encouraging the student to create names for the tools

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### Treatment: Speech tools (fluency shaping)

- Easy onsets (vowels)
- Light touches (consonants)
- Continuous phonation (cursive speaking)
- Reduced rate of speech (can be done by slightly stretching vowels)
- Pausing and phrasing

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### Treatment: Speech tools (stuttering modification)

- Cancellation (resets)
- Pull outs
- Preparatory sets
- Voluntary stuttering
- Bouncing
- Sliding

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### Stuttering modification: Charles Van Riper

- Assumes a constant, always present underlying neurological difference that you deal with when you need to
- Learn to accept your stuttering
- Reduce then eliminate avoidances and secondary behaviors
- Learn to stutter easily

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### Other speech tools

- DAF (delayed auditory feedback)
- The Rate-o-meter (set your speech on cruise control)
- The speech notebook
- The concept of a "loose" speech machine
- Use hierarchies when teaching tools
- Bump tag

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### Other speech tools

- Always have a rationale (Susan Hamilton, 2002).
- Use the students' own words and the words of others: inspirational quotes
- Find and reduce avoidances
- Role playing for teasing
- Encourage parents to set limits for reminders (you can't use tools all the time) (Hamilton, 2002)

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### Other speech tools

- "Stuttering is something I do, not who I am"
- The concept of careful speech
- "Two-part" sounds
- Altered fluency, naturalness
- Barry Guitar's concept of downshifting, gearing down (2006)

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### Other speech tools

- Rules for good talking: examples
  - Before you talk, think ahead: make a plan
  - When you talk, speak a little slower
  - Start out talking slow and smooth
  - Remember to make your speech flow like water
  - Say each word just one time

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### Other speech tools

- FYI-ing
- Self-advocacy
- The concept of "weirdness" and the weirdness scale (thank you Elyse Lambeth)
- The make your own stuttering iceberg activity (Derek Daniels, Wayne State University)
- Scripts

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### Scripts

- Well thought-out and practiced, humorous if possible, short explanations useful for disclosure, and for answering standard questions like "Why do you talk like that?"
- Example for disclosure: "I wanted to let you know before we start that sometimes I stutter. Don't worry, it's not contagious."
- "Just so you know, sometimes I stutter when I talk. I'm not any more nervous than you would be, I just have a stutter."

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### Scripts, continued

- "Sometimes I stutter. It doesn't bother me so don't let it bother you."
- "I don't do it on purpose. It's just the way I talk."
- "Oh, that? That's just my stutter."

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### Customizing treatment: Picking your way toward goals that will make a difference

- As treatment begins, let the results/lack of results/client reactions/ reports from family members guide your direction. What are you learning that she or he needs most?

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### Tricks and tools

- Tricks
  - Blinking before saying the word
  - Saying "uh" or "ah" before the word
  - Saying a little phrase "and another thing is" before every hard word
  - Substituting an easy word for the hard one
  - Not saying what you really mean
  - Getting a running start with other words

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### Effective communication as a part of therapy for students who stutter

- Learning how to make small talk
- The discovery of the positive uses of one's voice

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### What is effective communication?

- Speaking clearly (even while stuttering): using language in a precise manner to succinctly directly explain, describe, elaborate. Not rambling, nor jumping off topic, nor getting distracted nor going out on tangents.
- Making good eye contact. S. "I started doing more eye contact in the seventh grade and I started getting more friends and I thought "Oh. I should do more of this."

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### Effective Communication

- Being interested
  - monitoring posture and proximity
  - Understanding and using turn taking
  - Really listening
- Being interesting (but not weird)
  - Not focusing on one or two subjects
  - Understanding and using prosody

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### Ready for speech therapy?

- Who wants the treatment?
- Is the pain of the stuttering (staying the same) greater than the pain of change? (Scott Yaruss)
- Ready to take risks?
- Ready to look directly at the stuttering?

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### Natalie's story: Full circle

- Once seen as an affliction, now seen as a gift
- The most helpful advice or instruction she received from all her speech therapy

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### N's story

- One visit only
- Not at all ready or able to handle looking directly at stuttering

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### J's story



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### AA's story



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R's story

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E's story



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A's story



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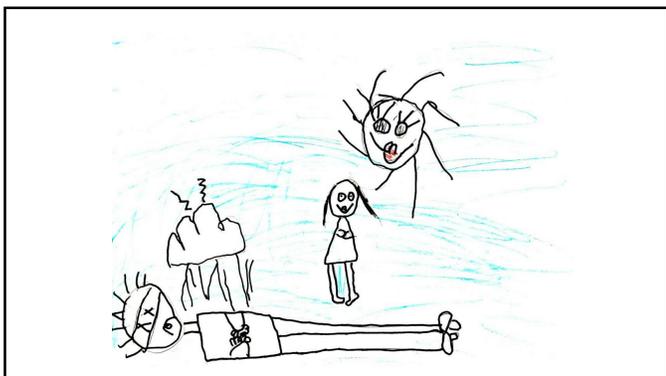
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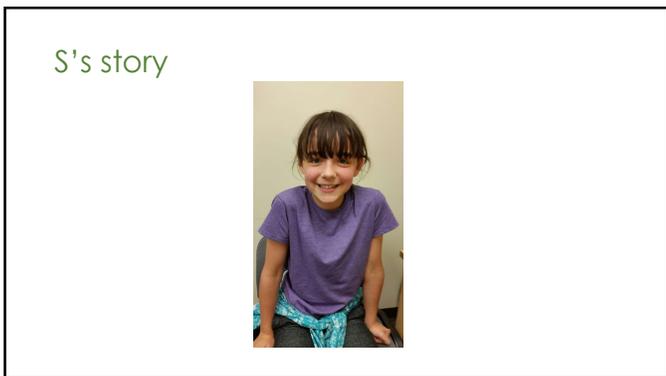
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### Generalization

- Plan from day 1 of treatment
- Model non-reactive responses to "errors"
- Communicate with other relevant people
  - Teachers
  - Parents
  - Siblings
  - Peers
- Say the word

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### Making stuttering part of the conversation

- Podcasts
  - StutterTalk
  - Stuttering is Cool
  - Women Who Stutter Podcast
- Books
  - Paperboy
  - Sometimes I Just Stutter
- Movies
  - Stutterer
  - The King's Speech

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### Support Groups

- NSA
- Friends
- TOPS
- KOPS
- Google hangouts?
- Start your own...

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### Generalization for Strategies

- Common target of generalization
- Risk of becoming the "Fluency Police"
- Generalization vs Desensitization
  - desensitization to using strategies

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### More advanced generalization

- Fade clinical supports
- The *treatment room* is a clinical support
  - Fade the clinical support
  - Do some treatment outside the room
- You are a clinical support
  - Fade the clinical support
  - Plan to have other people involved in some treatment activities

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### Make the client the expert

- Have the client *explain* the purpose of a clinical activity
  - To you
  - On video for showing to someone outside of treatment
  - To another member of a group
  - To their teacher
  - To a peer
  - To a sibling
  - To their parents

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### Make the client the expert

- Have the client *teach* someone to do what they are learning to do
  - Teach pseudo-stuttering
  - Teach "tools"
  - Give feedback
    - Make it OK for the new person to get it wrong
    - Make it OK for the client to provide feedback about how to do it right

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### Make the client the therapist

- Homework: re-create the *entire* session with another person
- Client becomes therapist
- Other person becomes client
- Requires time and buy-in from all parties
- Very powerful for uncovering misunderstandings

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### Video

- Bullying scenarios
- As a basis for re-creating sessions in other situations
- First step for talking with other relevant adults/peers
- Portability is a benefit

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## Resources

- Camp More: <https://www.ohsu.edu/xd/research/centers-institutes/institute-on-development-and-disability/about/camp-more.cfm>
- TOPS: [www.topsnw.com](http://www.topsnw.com)
  - Kristin Mangan
  - [kmanganslp@gmail.com](mailto:kmanganslp@gmail.com)
- KOPS: [www.topsnw.com](http://www.topsnw.com)
  - Sarah Herr-Davies
  - [sarahherr.sl@gmail.com](mailto:sarahherr.sl@gmail.com)
- National Stuttering Association (NSA)
  - [Westutter.org](http://Westutter.org)
- Stuttering Foundation
  - [Stutteringhelp.org](http://Stutteringhelp.org)




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## Resources

- Lew, Gail Wilson. *Jeremy and the Hippo (A boy's struggle with stuttering)*. The National Stuttering Association (1999)
- Reardon-Reeves, N. and Yaruss, J.S. *School-Age Stuttering Therapy: A Practical Guide*. McKinney, Texas: Stuttering Therapy Resources (2013)
- Reitzes, P. *50 Great Activities for Children who Stutter*. Austin, Texas: pro-ed (2006).
- *The Girl who Stutters*. Stuttering Foundation e-book.
- *The Way We Talk* (documentary film) [thewaywetalk.org](http://thewaywetalk.org) (2015).
- Vawter, Vince. *Paperboy*. [www.vincevawter.com/paperboy](http://www.vincevawter.com/paperboy)

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