Running head: STUTTERING

Understanding Stuttering in Children

A Discussion Guide for Professionals

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Introduction

Hello, my name is Anna Birstein and (in the spring of 2015), I was an undergraduate senior in the Applied Developmental Psychology Traditional program at the University of Pittsburgh. As part of our course, I completed this project to help the public, teachers, parents, and classmates better understand and become more accepting of individuals who stutter. Here you will find a discussion guide to the presentation on stuttering for professionals, a guide to the educational presentation for middle school children, and additional helpful information. A guide follows the sequence of slides of the PowerPoint presentation with speaker's notes for the adult who will facilitate the discussion. A guide also includes facts about stuttering, common myths and

misperceptions, and a guideline of how to address stuttering in school settings (Do's and Don'ts).

Part I: A Discussion Guide to the Presentation "Understanding Stuttering in Children"

Introduction (Slide 1)

It is important to know what stuttering is and which strategies have been proven to be effective to support students who stutter.

Definition (Slide 2)

According to Weis (2013), stuttering is "a marked impairment in speech fluency that reflects an underlying problem with speech production rather than a language problem... Children who stutter know what they want to say, but they have a problem saying it" (p. 150).

The new *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*, edited by American Psychiatric Association, DSM –V (2013) gives this communication disorder a new name, "Childhood-Onset Fluency Disorder" (APA, 2014).

Diagnostic Criteria (Slide 3)

The DSM-V defines Stuttering (Childhood-Onset Fluency Disorder) as a condition characterized by disturbances in the normal **fluency** and time patterning of speech that are inappropriate for the individual's age and language skills, and persist over time (APA, 2013, p.45). The other criterion is that the impairment in speech fluency should not be attributable to another developmental disorder, a mental disorder, or a medical condition (like stroke). The onset of symptoms is usually in the early developmental period (i.e., prior to the age of 5). To meet the diagnostic criteria for stuttering, the disturbance in speech fluency should "cause anxiety about speaking, or limitations in effective communication, social participation, and academic performance, or in occupational performance" (APA, 2013, p. 45).

Symptoms (Slide 4)

According to DSM-V(2013) and Weis (2013), the disturbances in the normal fluency of speech may be characterized by one or more of the following:

- 1. Sound and syllable repetitions (part-word repetitions): "ba ba baby."
- 2. Sound prolongations: "S>>>sometimes."
- 3. Broken words (pauses within a word): "Ta table."
- 4. Audible or silent blocking (filled or unfilled pauses in speech): "I like to go home."
- 5. Monosyllabic whole-word repetitions: "I-I-I see him."
- 6. Circumlocutions (word substitutions to avoid a problematic word).
- 7. Words pronounced with an excess of physical tension.

(APA, 2013, pp. 45-46; Weis, 2013, p. 151)

Eligibility for Services (Slide 5)

According to the U.S. Department of Education (n. d.), a child who stutters may be eligible to receive speech therapy under a federal law The Individuals with Disabilities Education Improvement Act of 2004 (IDEA, P.L. 108-446, Part 300 / A / 300.8 / c / 11).

In contrast to the DSM-V, the IDEA's definition of a Speech-Language Impairment includes communication disorders, such as stuttering, impaired articulation, language impairment, or voice impairment, "that adversely affects a child's educational performance" (U.S. Department of Education, n. d.).

IDEA mandates that state education agencies and local school districts provide special education services to children ages 3-21 who need them. **Speech therapy** is considered to be special education. IDEA is designed to provide a free, appropriate public

education, but children attending private schools are also covered under this law (Stuttering Foundation, 2015).

Early Identification and Intervention (Slide 5)

Early identification and intervention is important. The following signs may help to distinguish between stuttering and developmentally appropriate disfluencies.

According to Haynes, Moran, and Pindzola (2006), many young and preschool-age children demonstrate age-appropriate disfluencies, which, however, do not appear often, and may include whole word repetitions, pauses in speech, and relaxed hesitations. The authors stated that "the warning signs that should alert parents and teachers are:

- 1. Frequent part-word repetitions rather than word repetitions. More likely 'B-b-but', than 'but, but';
- 2. Repetition of a part of a word more than two times: 'ba-ba-ba-ba-ball';
- 3. Repetitions having an irregular rhythm 'b-ba--b-ball';
- 4. A sound held longer than normal (more than 1 second) 'Mmmmmy ball';
- 5. Excessive tension in the speech muscles (in the neck and face);
- 6. Fear of speaking in public."

(Haynes, Moran, & Pindzola, 2006, p 28)

Age of Onset, Prevalence, and Recovery (Slide 7)

According to Dworzynski and her colleagues (2007):

- An onset of stuttering is usually between ages 3 and 6 with almost no new cases being reported after age 12.
- Boys are two to five times more likely to exhibit stuttering than girls.
- Boys begin stuttering, on average, five months later than girls.
- 5% of preschool children are affected, but by adolescence the percentage drops to 1%.

• The highest rate (70% or higher) of recovery exists during the first 15 months **post-onset** (Dworzynski, at al., 2007, pp. 169-170).

Causes and Treatment (Slide 8)

According to the current research, the exact causes of stuttering are unknown (Dworzynski, et al., 2007, Nye, at al., 2013, Weis, 2013). A large genetic component can be taken into account and may play a role in risk assessment (Dworzynski, et al., 2007, p.171). No single treatment strategy would work for every child who stutters (Yairi, at al. 1996). Early identification and referral to services is important, because behavioral intervention strategies are most effective before age eight (Nye, at al., 2013).

However, it may be beneficial to defer treatment for those with few or no risk factors (such as family history of stuttering or bilinguality), or with mild stuttering that does not cause concern for either child or parents. Teachers should consult with the child's speech and language pathologist to be "on the same page" in understanding individual differences in the course of the disorder and in the current treatment (Nye, et al., 2013).

Stuttering Stereotype (Slide 9)

No intellectual or emotional behaviors distinguish children who stutter from those who do not (Haynes, Moran, & Pindzola, 2006, p. 137). However, a negative "stuttering stereotype" exists in most populations (Guntupalli, et al., 2006; Flynn, & Louis, 2011). Teachers of a student who stutters should be aware of and sensitive to possible negative perceptions and attitudes toward individuals who stutter in their classrooms and schools. They may also examine their own perceptions and possible biases and misconceptions toward people who stutter (Langevin & Prasad, 2012).

An activity: Myth or Truth? (Slides 10 and 11)

This activity is based on the information from the book *Understanding Stammering* or *Stuttering*. *A Guide for parents, teachers, and other professionals* by Elaine Kelman and Alison Whyte (2012) (Part "Myths about stammering," pp. 38-40).

Distribute the handouts to the audience. Let each audience member use the handout (page 1), to decide which statements are correct in his/her opinion. Allow time to answer (You may ask them to "think-pair-share" with their neighbor).

Handout A (page 1) for the activity "Myth OR Truth" includes the following 7 statements:

- 1. There is exactly the same range of intelligence among children who stutter as there is among non-stuttering children.
 - 2. Parents, their behaviors, or parental practices do not cause stuttering.
- 3. Stuttering is caused by nerves (children may stutter because they are nervous or anxious).
 - 4. Stuttering is caused by an event in life.
 - 5. Children who stutter are usually shy and lack confidence.
 - 6. Children (and adults) who stutter need help to speak.
- 7. Children who stutter experience reduction in stuttering when they sing, speak to an infant or a pet, or read aloud the passage in unison with a large group.

Handout A for "Understanding Stuttering in Children" presentation is available in PDF format. The following slide (11) and the presenter's notes include the correct answers and comments, as follows:

ist statement was true. The common myth: Children who stutter are not as intelligent as other children (We tend to associate intelligence with the ability to communicate).

2nd statement was true. The common myth: Parents are to blame for their child's stutter. This is a very persistent myth, and this notion has often been repeated in the media.

3rd statement was false. The truth is: People who stutter are not more nervous than the general population. Having a stutter may cause a child to BECOME more nervous. Reactions of other people (such as teasing, bullying or just impatience of the listeners) may lead to development of fear of speech.

4th statement was false. The truth is: Stuttering is neuro-developmental disorder that is unlikely to be caused by an event. Even when the family recalls the event to precede an onset, such event may have been a trigger, rather than a cause of the condition.

5th statement was true. The myth is: Because children who stutter may not speak in class, it is often assumed that they are shy and unconfident. Reactions of other people do affect their confidence, but otherwise their personalities are as different as among general population.

6th statement was false. The truth is: Finishing their sentences for them may only upset children (and adults) who stutter. They really do not want others (who think that they know what individuals who stutter are about to say) to finish their sentences.

7th statement was true. Nearly all children report a dramatic reduction in stuttering when they sing, speak to an infant or a pet, or read aloud the passage in unison with a large group of students.

(Kelman & Whyte, 2012, pp. 38-40; Weis, 2013)

Do's and Don'ts for Teachers (Slides 12-14)

LaBlance, Steckol, and Smith (1994) suggested a list of effective strategies teachers may use to support a student who stutters. The main strategies were: creating silences (pauses) in interactions, modeling slower speech and shorter words and sentences, and showing acceptance of what the child expresses rather than how it is said. Teachers

should treat the student who stutters with the same respect as any other student in the class, and not reduce their expectations because of the disfluency. However, according to the authors, an additional time may be needed for the presentations (LaBlance, Steckol, & Smith, 1994). In the PowerPoint "Understanding Stuttering in Children" these helpful strategies are arranged to create the mnemonic rule "PRIME speech" (Slide 12).

According to LaBlance, Steckol, and Smith, (1994), one of the evidence-supported practices is to assure the student that it is OK to have disfluencies. The authors caution that teachers should acknowledge disfluencies in younger children without labeling them (by using the words a child uses to describe his or her speech, such as "bumpy" or "hard").

The evidence suggests that "creating supportive communication environments, where individuals who stutter feel comfortable speaking, may reduce their anxiety and, consequently, frequency or severity of stuttering episodes" (Liverach & Prasad, 2012, p.70). These strategies can be used as a good preventive measure for a child at risk for developing stutter, and will help to create comfortable speaking climate in the classroom for all students (Dworzynski, Remington, Rijsdijk, Howell, & Plomin, 2007; LaBlance, Steckol, & Smith, 1994; Nye, et al., 2013)

Implications from Research (Slides 15 - 17)

- 1. Teachers should be aware that a child may be prone to stuttering when there is a strong family tendency (Dworzynski et al., 2007).
- 2. Nye and his colleagues suggest teachers to consult with the child's Speech and Language clinician (SLP) to learn about individual differences in the course and current treatment (Nye, et al., 2013).
- 3. Teachers and caregivers of a child who stutters may have to address anxiety issues. Stuttering may be associated with or lead to social anxiety disorder, and proper intervention addressing anxiety may prevent numerous negative consequences of stuttering. It is important to address social anxiety in children who stutter in earlier

stages, before their "**subclinical** fears and anxious associations" become a disorder (Iverach & Rapee, 2013, p. 220).

- 4. Social skills training may lessen social fears of a student who stutters if he or she experiences discomfort and lack of engagement in social situations (Liverach & Prasad, 2012). Such training is proven to be most effective if planned and implemented after a careful assessment of student's individual social skills deficits, and in collaboration with the student's speech pathologist (Kerr, & Nelson, 2010, pp. 278-279).
- 4. Langevin and Prasad (2012) stated that comprehensive bullying prevention programs can effect positive changes in peer attitudes toward children who stutter and toward bullying in general. Such anti-bullying programs should include classroom rules that serve to restructure the social environment and reduce the reinforcement of **bullying consensus** (Langevin & Prasad, 2012).
- 5. Guntupalli and his colleagues (2006) advised people who stutter to join support groups (e.g., National Stuttering Association, Stuttering Foundation of America, etc.) to connect to others who share similar emotional experiences. Teachers can communicate this advice to a student who stutters, and help him or her (or the parents) to find support groups in their area.

A Final Activity: "Examine a case study" (Slide 18)

This activity is based on a case study from the Chapter 5 "Communication Disorders in Children" of the book *Introduction to abnormal child and adolescent psychology* by Robert Weis (2013).

Handout A includes a following case study and the questions for a "think-pair-share" activity:

A Case Study: Davis's Stuttering

Four-year-old Davis was referred to our clinic by his pediatrician because of problems with stuttering. His father explained, "It started about two months ago. He is always been a good talker. He began saying words at 10 months and could speak in simple sentences by his second birthday. Recently, however, I noticed, he's having more trouble getting the words out." His mother added, "At first, Davis just repeated the first syllable of certain words. Then, it occurred more often. Recently, he's been having trouble beginning his sentences. The therapist turned to Davis:

Therapist: Davis, do you like the toys I have in my office?

Davis: (Puts down action figure.) Y-y-y-yes (Pauses, as if he wants to speak.) B-b-b-but I l-l-l-like Thomas the Tank Engine b-b-b-etter.

Therapist: What's your favorite Thomas train?

Davis:(Pause,) I l-l-l-ike. . . .

Father:(Interrupts.) Davis. Try starting again, this time clearly.

Davis: (Frustrated.) I l-l-l-like. . .

Mother: Percy's your favorite, isn't it?

Davis: Y-y-y-yes.

The father explained, "That's pretty typical. He just can't get the words out. We make him start over to practice speaking correctly. We don't want him to practice stuttering. Do you think that's a good idea?"

The therapist replied, "If you like, I can show you some other strategies that might work better." (Weis, 2013, pp. 151-152)

Think-pair-share: What would you recommend the parents of Davis if they asked your advice as a teacher of their child, or as a family friend who works in the field of education?

Discuss with the whole group: What information from this Presentation may help Davis's parents to better understand his stuttering?

Facts from Research

Stuttering in Bilingual Children:

Stuttering in only one language by bilingual children is rare (Howell, Davis, & Williams, 2008). If a child (whose native language is other than English), only experiences disfluency when she or he speaks English, this may indicate that the child does not have stutter, but rather has difficulty using a new language.

For young children (younger than 8), whose native language is other than English, teachers should encourage the child's parents to talk and read the books with him or her in their native language at home. This may help to reduce risk of developing stuttering in young bilingual children (Howell, Davis, & Williams, 2008)

Instinctive Reactions to Stuttered Speech:

People who do not stutter react differently to overt stuttering than they do to fluent speech. Understanding listeners' instinctive negative emotional and physiological responses can help a student who stutters to develop coping strategies "to deal with the host of potential social penalties associated with stuttering" (Guntupalli, et al., 2006. p. 6). However, most importantly, such understanding can help the listeners to consciously lessen those reactions by trying to relax while listening to a stuttered speech (Guntupalli, et al., 2006).

Presentations on Stuttering:

Negative attitudes toward students who stutter can be improved by a presentation on stuttering via a live presentation performed by a person who stutters, or a professionally prepared presentation (Flynn, & Louis, 2011). School teachers can use such presentations to educate students about the disorder. According to Flynn, and Louis, (2011), the live presentation could also empower a presenter -- a student who stutters (if it is appropriate and comfortable for this student). For this project I created a presentation "How to Help Your Friend Who Stutters" intended for middle school children and designed as a guessing game. It consists of a PowerPoint presentation with presenter 's notes, a guide to this presentation (see Part II) and a handout for the game (Handout B).

Glossary

Bullying consensus is the situation where other students do not interrupt bullying on behalf of the victim.

Fluency refers to the ease and automaticity of speech. Fluency has several components including rate (the speed at which people speak), duration (the length of time of individual speech sounds), rhythm (the flow and fluidity of sounds), and sequence (the order of sounds). Fluency is important to speech because it increases the likelihood that listeners will understand speakers and respond appropriately (Weis, 2013).

IDEA - The Individuals with Disabilities Education Act (IDEA) is a Federal Law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to eligible infants, toddlers, children and youth with disabilities. Infants and toddlers with disabilities (birth-2) and their families receive early intervention services under IDEA, Part C. Children and youth (ages 3-21) receive special education and related services under IDEA, Part B.

Post-Onset: After the onset of a disease or other condition. The onset is the initial phase of a disease or condition, in which symptoms first become apparent.

Phonology refers to the sounds of a language and the rules for combining these sounds (Weis, 2013, p. 132)

Speech Therapy is defined under IDEA (2004) as speech-language pathology services that are performed by Speech-Language Pathologists (SLPs), who work to prevent, assess, diagnose, and treat speech, language, social communication, cognitive-communication, and swallowing disorders in children (ASHA, n.d.).

Subclinical fears. The term **Subclinical** is related to a condition that is not severe enough to present definite or readily observable symptoms of a disease or disorder.

Helpful Resources:

- www.asha The American Speech-Language-Hearing Association maintains basic information on fluency disorders, risk factors, and communication tips for the general public.
- 2. www.nsastutter.org The National Stuttering Association is a self-help and support organization for people who stutter. The Website provides information on local support groups, youth days, and the like
- 3. http://www.stutteringhelp.org/ Stuttering Foundation's Website includes articles, videos, handouts, booklets, posters addressed to children, adolescents, parents, teachers and professionals who work with individuals who stutter (some of them available in Spanish). For example, a video and a handbook "Stuttering: Straight Talk for Teachers." designed for every elementary classroom teacher with a child who stutters covers teachers' FAQ and has helpful classroom suggestions.
- 4. The PA Education Law Center's Parent and Advocate Guide: Right to Special Education 2014. This Guide provides clearly explained legal rules for special education and early intervention programs in Pennsylvania for children from

ages three to 21. This Guide is an on-line handbook, which includes special education information and indicates links for the specific information. (Available in PDF format from:

http://www.elc-pa.org/resource/elc-parent-guide-right-to-special-education-2014/

5. http://www.sbbh.pitt.edu/ The School-Based Behavioral Health (SBBH) Website represents the collaboration of University of Pittsburgh students, faculty members, and institutional partners working to improve schools by promoting the behavioral health and safety of children and adolescents. Here, you will find resources to support children and teens who have emotional and behavioral challenges.

Helpful information about Anti-Bullying programs:

A book with humorous and practical suggestions for addressing teasing: *Bullies Are a Pain in the Brain*, by T. Romain of Free Spirit Publishing.

An article: Langevin, M., & Prasad, N. N. (2012). A stuttering education and bullying awareness and prevention resource: A feasibility study. *Language, Speech, and Hearing Services in Schools*, 43(3), 344-358 (see the Annotated Bibliography below).

The U.S. government's Substance Abuse and Mental Health Services Agency (SAMHSA) has a free on-line course for staff professional development, "The ABS's of Bullying" available on its website (Kerr & Nelson, 2010). Facts sheets for parents and students and lesson plans are also included in this course available from:

 $\frac{http://safesupportive learning.ed.gov/resources/abcs-bullying-addressing-blocking-and-c}{urbing-school-aggression}\,.$

Books for Professionals and Caregivers

For **teachers and other professionals** in the field of education, who would like to know more about how to help a student with communication problems within regular

classroom, I would recommend the book *Communication Disorders in the Classroom: An Introduction for Professionals in School Settings*, by Haynes, W. O., Moran, M., & Pindzola, R. (2006). Publisher: Jones & Bartlett Learning.

Reviews: "The fourth edition of Communication Disorders in the Classroom presents an updated portrait of the far-reaching impact that communication impairments have on the lives and success of students from preschool through adolescence. Authors William O. Haynes, Michael Moran, and Rebekah H. Pindzola, all professors in the Department of Communication Disorders, Auburn University, discuss the range of impairments found in school-age children with suggestions for teacher intervention. A specialist in the particular subject area wrote each chapter in this book; the authors have had many years of clinical experience in their areas and have studied application of speech-language pathology in public school settings."— By SirReadaLot.org, October 2005.

For parents and families, I would recommend, as a good source of most recent information about stuttering, the book *Understanding Stammering or Stuttering. A guide for parents, teachers, and other professionals* by Elaine Kelman and Alison Whyte. Published by Jessica Kingsley Publishers (London, UK) in 2012, this book is written by speech and language therapist with more than 25 years of experience in the field of stammering (stuttering in the UK). The book also includes the voices of the children who stutter. One of the activities for the presentation "Understanding Stuttering in Children" is based mostly on the information from this book (Part "Myths about stammering," pp. 38-40)

Review: "The book is chock full of good, up-to-date information about the possible cause of stuttering, what makes stuttering better or worse, and how children and parents feel about stuttering. There are valuable tips for parents about how to respond to your child's stuttering, what goes on in therapy, and where to get even more information. Readers will appreciate the clear, lively writing, and the many quotations from children who stutter and their parents." – By Barry Guitar, PhD, Professor of Communication Sciences and Disorders and Professor of Psychology, University of Vermont, 2014.

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Part II: A guide for the Classroom Presentation "How to Help Your Friend Who Stutters"

Age Group: ages 11–14 (Middle school)

As a teacher with a student who stutters in your classroom, you may decide to educate your students about stuttering. This educational presentation will assist you in informing them. It will provide helpful strategies to improve the communication climate in your classroom, and will help all students to support a classmate who stutters. The presentation described in this Guide includes a PowerPoint presentation (the presenter's notes included) and a handout for the activity. This activity is designed for middle-school students, and intended to be presented to them as a guessing game activity, rather than as a lecture.

Please note: Before deciding to implement this educational presentation talk privately to your student who stutters and ask his/her opinion if such a session will be helpful and if she/he is willing to participate in this presentation. Ask for the parents' permission, and consult with the child's speech and language pathologist and student's IEP team before deciding to implement this presentation. Invite the Speech and Language pathologist to participate in the presentation (it could be a part of speech therapy).

The following information session and the activity are based on the information from the recourses listed in the References and Annotated Bibliography sections of this project. Use the information from the following guide to facilitate your game and the discussion. This Guide follows the sequence of slides and presenter's notes of the PowerPoint presentation "How to Help Your Friend Who Stutters."

Materials needed: computer with an access to Internet; projector; handouts (one for each student); 5-6 printed images of celebrities who stutter; classroom board and chalk; poster board and markers.

From the available sources listed below, you may choose 5 to 6 images of celebrities that are familiar to your students. Print and display them on the classroom board before the session. Print the handouts to use them for the guessing game activity.

Use a large poster board and markers to create a list of classroom rules during the follow-up activity.

The images of famous people who stutter are available from Stuttering Foundation website. Their poster: *18 famous people who stutter* is available from: http://www.stutteringhelp.org/sites/default/files/FamousPeopleBrochure EmilyBlunt.pdf

More photos of famous people who stutter are available from: http://www.mnsu.edu/comdis/kuster/famous/famouspws.htm .

A Warm-Up Activity

Start by demonstrating the photos of famous people. Ask your students who these people are and what they may have in common. Allow time to answer. Will the students figure out that these celebrities stuttered? Do not give them this answer yet.

Educational Presentation

Start the PowerPoint Slide Show "How to Help Your Friend Who Stutters." Facilitate the discussion and the game by using presenter's notes of the presentation as follows.

Slide 1. **Introduction**

Introduce the topic and start the information session by saying to your students: "Today we will check what we know about stuttering, how to talk to a friend who stutters, and how to make these conversations easier."

Explain to the students that many people (including teachers) may have incorrect assumptions about how to best address stuttering speech in the conversation. Use the language they will understand. You may say to your students, "We all sometimes do things that we think will help our friend who stutters, but there might be a better choice."

Say: "We will play a 'guessing game,' where you will choose one from every two choices of what you think will help a friend who stutters to feel comfortable talking. Then

we will compare our guesses with what scientists have discovered is the best choice to support a friend who stutters."

Slide 2. Facts about Stuttering

Read aloud and comment:

After reading "Kids who. . . ," explain that stuttering is a condition that only affects speech (an ability to produce words), and it does not affect thinking of people who stutter or their understanding of what other people are saying. Say: "Children who stutter know what they want to say, but they have a problem saying it."

After reading that "Stuttering is not. . .," you can explain that some possible causes are genetic and neurological, meaning that it is a condition that person have not created, and cannot control. You can say: "We do not know causes of stuttering yet, but we think that maybe some people are just born this way."

After reading "Reactions of others. . .," say: "Today we will learn about some of these reactions, as we'll make the choices in today's game of guessing the best ways to respond."

After reading: "Teasing and. . .," say: "Scientists found that bullies were less successful and had troubles later in life. Children who were not bullies but did not stop the bullying learned to be passive observers in life."

Slide 3. What Will Help

This is the first slide of the "game." There is no rule or competition, so you can decide to make this game individual, think-pair-share, or even small group activity. Distribute handouts to the students.

The slide 3 should first appear without the marks. Allow time for students to read through both options or read the options aloud.

Tell students to mark on their handouts what they think will help their friend who stutters during the conversation (choosing one from the two options).

Press "enter" twice to make the marks appear (green for the correct and red for the incorrect choice).

Please Note: If your student who stutters is present and willing to participate, ask his or her opinion on the better choice. Listen carefully and write down his/her choice.

Turn to the next slide to check with the students the scientific reason for the correct choice. Say: "Let's see what the scientists have learned about each choice."

Slide 4. What We Know

Allow time for students to read the explanations or read them aloud.

Explain that scientists found that listening to a stuttered speech produced a reaction of physical tension in many people. Say: "Your tension is visible to someone who stutters and makes him/her feel tense."

Slide 5. What Will Help

Read or allow time to read and to think which answer is the best choice.

Tell the students to mark their choice and then show what the correct choice was (by pressing "enter" twice).

Say: "Why do you think the answer on the right is the best choice?" Listen to their answers.

Please Note: If your student who stutters is present and willing to participate, ask his or her opinion. Then turn to the next slide.

Slide 6. What We Know

After reading the explanations, tell the students that maintaining eye contact during a conversation is a universal rule for talking with each other in Western cultures, and there is no exception for talking with the friend who stutters.

If time allows explain that in some cultures looking in the eyes while talking may be considered a sign of disrespect (Middle Eastern Cultures, Asian Cultures, African and Latin American Cultures). You may add that some individual people may feel that direct eye contact is a sign of aggression or may dislike it for other reasons.

Slide 7. What Will Help?

Allow time to read, to think, to answer. Show the students the correct choice (by pressing "enter" twice).

Say: "Why do you think talking slowly might help?" Allow time to answer. If someone will say that speaking slowly will help a friend who stutters to understand better, remind the students that they learned from the FACTS slide that stuttering does not affect a person's ability to understand others.

Please Note: If your student who stutters is present and willing to participate, make sure to ask his or her opinion. Turn to the next slide.

Slide 8. What We Know

Read or allow time to read the explanations. Discuss with the students who else may benefit from slower speech (1), and frequent conversations (2).

(1)- People whose native language is other than English; people who are shy or feel tense for other than stuttering reasons.

(2)- Everybody.

Turn to the next slide.

Slide 9. What Will Help

Read aloud or have the students read both choices. Allow time to think and to answer.

Then show the students the correct choice (by pressing "enter" twice). Ask your students, who else may benefit from taking turns in the conversation (everybody).

Please Note: If your student who stutters is present and willing to participate, ask his or her opinion. Turn to the next slide.

Slide 10. What We Know

Read aloud of allow time to read the explanations. Say: "Finishing words for your friend points out on his or her stuttering, and it makes him or her feel frustrated. You may also be wrong, and he or she wanted to say something different."

Add that it is not always easy to wait while a friend who stutters is struggling to say something, but it is necessary in order to be helpful. Say: "We need to wait if we want to help him or her, and let them finish their words."

Turn to the next slide.

Slide 11. What Will Help?

Read aloud or allow time to read and make their choices. The correct answer seems to be obvious, but ask the students to think about both choices. Then show the students the best choice (by pressing "enter" twice).

Say: "How often do you think people will choose the first option?" Listen to their answers.

Say: "How can you show that you are interested in what a person says?"

(By asking questions, nodding, smiling, not interrupting, and listening attentively.)

Please Note: If your student who stutters is present and willing to participate, ask his or her opinion. Turn to the next slide.

Slide 12. What We Know

Read aloud or have the students read explanations. Discuss why pretending is not the best choice. (Pretending is never sincere and it may make a person who stutters feel ashamed, or think that you are ashamed by his/her stuttering).

Please Note: If your student who stutters is present and willing to participate, ask his or her opinion. While listening to his or her opinion, *model the correct behavior*. Be relaxed; control your breathing; nod or smile, keep eye contact (if possible and appropriate); do not interrupt; do not finish the words he or she may struggle to say.

Discuss with the class how to show your friend that it is OK to stutter. (Just saying that it is OK, or saying, "I hear what you are saying" in a friendly manner.)

Listen and write students' ideas on the board: they might be very creative.

Conclusion of the Game (same slide):

Say: "All good choices we made in the game could help your friend to feel more comfortable speaking." Write all five best choices on the board. Say: "Doing these helpful things will make the conversations easier for your friend who stutters and for everyone else." Add that it will not cure his or her stuttering, but will make a friend who stutters feel much better.

Slide 13 People Who Stutter

Demonstrate the video linked to this slide (by clicking the "Play" button). Thomas Kuster created this YouTube presentation for the 2010 International Stuttering Awareness Day Online Conference. This two-and-a-half minute slide show depicts people who stutter as significant members of society whether they are historical figures, celebrities or successful professionals (https://www.youtube.com/watch?v=qowkAhkQl54&t=24).

Tell or remind (if they figured it out during the warm-up activity) your students that all celebrities, whose pictures you showed them, stuttered. Discuss that most professions

that these people have chosen required a lot of publicity and extra courage from someone who stutters. Turn to the next slide.

Slide 14 **Churchill's Quote**

Say: "Sir Winston Leonard Spencer-Churchill, was a British politician who was the Prime Minister of the United Kingdom from 1940 to 1945 and from 1951 to 1955."

Read aloud the quote from the image. Ask students to think about the quotation.

Say: "How it is related to today's topic?" Listen to what they say.

Ask them to think about how much courage it takes to start talking for someone who stutters. Listen to what they say.

Ask them to think about others who might also need courage to speak. Listen to what they say. (It may be someone who is shy, who is bullied or teased, who is a slow speaker, who is new or somehow different from the group, who is not treated with respect by the classmates).

Say: "Why do you think he said to listen to others also takes courage?" Listen to what they say. (It may be an urge to interrupt because of the fear to hear something unpleasant.)

Ask the students how do they feel when treated with respect while talking. Say: "Will such respect help everybody to feel safe and comfortable to talk?"

Please Note: If your student who stutters was present and participated in the discussion, *thank him or her for their courage.*

Turn to the next slide.

Slide 15. Books to Read

Offer students to read one of the listed books. You may decide to order them from your local library to make them available. However, I suggest making it an enrichment activity

rather than a required reading. Considering your students' reading levels, you may offer them to choose the other book from the list (See the section below: "Books for Children").

In a private conversation, you can offer a student who stutters to read the books that may help him/her to deal with the condition. Collaborate with student's Speech and Language Pathologist to choose the proper book.

A Follow-Up Activity:

On the following school-day, recall with your students the helpful communication strategies they have learned:

- talk slowly, be relaxed,
- take turns while talking,
- do not interrupt,
- keep eye contact (when appropriate),
- listen with attention,
- include in conversations everyone who wants to talk,
- ask questions to show your interest,
- do not make fun of each other's differences,
- conquer bullying by standing up for those who are teased in school.

List these strategies on the board. Encourage the students to make (or revise) the classroom rules for talking to each other, according to what they have learned. Post these rules (Allow the students to create a colorful poster). These rules should be agreed upon to use with everybody and not only while talking with a person who stutters. Remind that everybody will benefit from such an inviting style of conversation.

During the following weeks have students role-play and practice the new rules.

Model and praise correct behaviors. Make sure the students remember the rules well.

Teach them how to stand up against bullying and teasing. The information session with

the follow-up activity will create a good conversational climate and will help all students to support a classmate who stutters and each other.

This Guide and the Presentation are based on the information from the sources included in the References and Annotated Bibliography sections of this work.

Recommended Children Literature:

I Thought My Soul Would Rise and Fly - The Reconstruction Era Diary of Patsy (Dear America), by Joyce Hansen (1997). Publisher: Scholastic Trade. Reading level 9-13.

This "Dear America" book is about a freed slave girl named Patsy. Although Patsy stutters, she shows courage to speak. Patsy writes about how frustrated she gets with her stuttering. People think she is dumb but she is really very smart. Twelve-year-old Patsy keeps a diary of the time following the end of the Civil War and the granting of freedom to former slaves.

Reviews: "In this historical fiction selection from the "Dear America" series, the newly freed slaves of Davis Hall plantation of South Carolina find their lives in turmoil. Patsy has lived at Davis Hall for all of her life. Unfit for fieldwork due to a limp, she has tended to the master's niece and nephew, learning surreptitiously to read and write. The ending of the Civil War has brought, in theory, the long-sought freedom, but the former slaves are still tied to the plantation. For Patsy, it means being shuttled from one plantation job to another as workers leave. Then, when the promised teacher does not show up, she begins to tutor the young and old slaves. Armed with the ability to read and write, Patsy and her people are able to leave Davis Hall to seek a better life. While the story is told in the first person, it is done without dialect, which makes for an easier read. The author has included historical notes, maps and pictures from the period." -- by Mary Sue Preissner (Children's Literature)

The Very Worst Thing by Hayden, Torey L. (2003) Publisher: New York NY: HarperCollinsPublishers. Recommended for ages 9-13.

Reviews: "David has had so much misery in his life that he keeps a list of "Very Worst Things" constantly running through his mind. He is not very optimistic when he arrives at his sixth foster home at age ten. He has never been good at making friends and his stuttering embarrasses him. An easy target for bullies, he gets into trouble for fights he does not instigate. Then he finds an owl egg and meets up with Mab, the girl genius of his class. David names the owl King Arthur, based on a movie he has seen. He is surprised when Mab brings a book to their meeting place. She reads King Arthur stories aloud after they turn the egg in the incubator each day. They hatch the egg together, feed the owlet chopped up mice from the barn, and make plans to train it for hunting. Mab's dad warns that wild animals do not generally survive in captivity, but David chooses to ignore his advice and the very worst thing does happen. The owl dies. David is devastated until he realizes all that he has gained in this experience. He has a home with someone who cares about him; he has a friend; he has his first job with Mab's dad; and he has solved his problem with the bullies without fighting. An overall uplifting story." By Phyllis Kennemer, Ph.D. (Children's Literature, 2003)

Love Puppies and Corner Kicks by Bob Krech (2010) Publisher: Dutton Children's Books, New York. Recommended **for ages 11 to 15**;

Andrea was a "soccer star" while she lived in America. That was before her parents took teaching positions in a small village in Scotland. Although Andrea's sister enjoys every minute of this adventure, for Andrea it is the worst of all possible situations. Now she is alone in a new school with no friends. She is painfully shy and struggles with stutter that she thought she had under control. After people see her soccer talents, she finds new friends.

Reviews: "This book is pretty standard fare for teenage novels, with a main character positive that her parents do not understand her, fearful of her friends disliking her, and afraid to speak to the boy she likes (and who obviously likes her). Andrea's stuttering, and

her ongoing inner dialogue on what she has to do in order to speak clearly gives a unique point of view. The fact that little of the story's action involves her stutter is also a plus point. Although this book is not a standout novel, it is a decent story." – by Heather Robertson Mason (Children's Literature, 2010)

Jimmy Finds His Voice, by Doti, James L., Minneapolis, MN: Jabberwocky Books, 2012. Recommended for ages 8- 12.

The author James (Jimmy) Doti is the son of Italian immigrants. Hardly a day went by when the immigrants' children weren't reminded to do well in school so they could go on to college. Jimmy was a good student, but in his early years of grammar school, he had to work hard to overcome a speech impediment. He ultimately earned a Ph.D. in economics from the University of Chicago and now serves as president of Chapman University in Orange, California. In this touching autobiographical picture book, a young boy discovers that enthusiasm can trump his speech impediment. This is an empowering story of courage for people of all ages.

Reviews: "Jimmy doesn't want to go to school. He's been in the first grade for a few months now, but he still thinks the huge doors at the entrance to his school are scary. It's not just the big doors, though, that are making him nervous and a little scared; it's knowing that as soon as he speaks, the other kids in his class will laugh and make fun of him. Jimmy knows what he wants to say, but sometimes the words come out wrong. Jimmy gets even more nervous and scared when his teacher, Mrs. Lyons, tells the children they will be performing a play for all their friends and families. The play is 'The Elves and the Shoemaker' ... and she casts Jimmy as one of the elves. Mrs. Lyons assures Jimmy that he'll do just fine. But how will he ever be able to speak in front of an audience?"—by Book jacket (2012).

Ben Has Something to Say: A Story about Stuttering, by Laurie Lears. Publisher: Morton Grove Ill.: Albert Whitman, 2000. Recommended **for age K-Grade 3.**

Reviews: "Ben befriends a dog, but, he is too self-conscious about his stuttering to ask the owner if he can help care for it. Even though his dad encourages him to talk, Ben will only use gestures or notes to communicate until the owner threatens to take the dog to the pound. At that moment, Ben overcomes his anxiety and has enough courage to ask to keep the dog. An excellent story for . . . for children who stutter, this book would also be helpful for classmates of a child who stutters." – by Latson , S 2000(*Parent Council, Volume 8*)

Additional Resources for Children Literature

- 1. The article by Bushey and Martin (1988) "Stuttering in Children's Literature" (1988) consists of brief reviews of **20** children's fiction books in which a character stutters. The authors explored how children's fiction portrayed certain aspects of stuttering, such as symptomatology, causation, and treatment. (See the Annotated Bibliography for further information).
- 2. More resent work by Logan, Mullins, and Jones, K. M. (2008) was an article" The depiction of stuttering in contemporary juvenile fiction: implications for clinical practice." The authors reviewed 29 contemporary juvenile fiction books featuring characters who stutter and assessed the presentation of stuttering-related content. More information about this article you can find in the Annotated Bibliography part of this project.
- **3.** "Stuttering in Children's and Adolescents' Literature" is a list of books about stuttering created by Minnesota State University's staff and students (available from

https://www.mnsu.edu/comdis/kuster/Bookstore/childrensbooks.html).

Annotated Bibliography: Stuttering

Bushey, T., & Martin, R. (1988). Stuttering in children's literature. *Language, Speech, and Hearing Services in Schools, 19*(3), 235-250.

Dr. Richard R. Martin, the University of Minnesota, was a Fellow of the American Speech–Language–Hearing Association. In 1985, he received the ASHA Council of Editors Award for "meritorious articles published in the field of speech–language and hearing." [1] His program of behavioral research at the University of Minnesota studied stuttering treatment, especially for children, and his innovations in measurement influenced approaches to stuttering therapy and research. His *speech naturalness scale* became a standard component of stuttering treatment efficacy protocols. The research he produced includes some of the most frequently cited publications on stuttering [1]. Tahirih Bushey educated at and worked for Department of Communication Disorders, University of Minnesota, Minneapolis, Currently she works as a Speech and Language Pathologist, and an Autism Consultant [2].

Their article "Stuttering in children's literature" (1988) consists of brief reviews of 20 children's fiction books in which a character stutters. The authors explored how children's fiction portrayed certain aspects of stuttering, such as symptomatology, causation, and treatment. The authors found that these books generally portrayed severe types of stuttering and that most of the stories portrayed the character(s) who stuttered in a weak or negative fashion, and some of them did not portray an accurate cause of stuttering. However, many of the reviewed books depicted stuttering properly. Fiction can affect reader's thoughts, emotions, and attitudes. Fiction can modify the attitudinal and reactive behaviors of children. Many children who stutter would benefit from exposure to one or more stories in which a character stutters. The authors stated that very little experimental or clinical literature exists relative to the use of fiction in treatment programs with children who stutter. Both the books and the children who stutter are unique, and this review of the fictional literature suggests some common possibilities. No attempt was made to advise the reader whether, or how, a particular story should be used.

The most important implication for the teachers would be the list of these "good" books to add to the curriculum. Each of the reviews contains information about the characters, a short synopsis of the plot, a brief evaluation of the book's interest level, and a discussion of the role of stuttering in the story. According to the authors, many stories reviewed in the article are well written and potentially appropriate to use. They can be used as a therapeutic device and an educational tool in the classrooms on different grade levels.

A school or classroom setting was an integral part of the plot for most of the characters who stuttered. Such stories can be used to facilitate classroom discussion about bullying, diversity, empathy, and acceptance with a group of students in the secondary school setting. For example, the book *The Skating Rink or The Change Over* can be used for a group of adolescents to stimulate a discussion about ways stuttering might affect important life-long decisions. The teacher of a very young child who stutters might read the story *Emily Umily* aloud to the child's classmates in order to help them be more understanding and empathetic. With an elementary school child who feels she does not "belong" because she stutters, the book *Trouble With Explosives*, could be used as a tool

to influence her social skills and broaden her view of what is acceptable diversity. You can educate your students about stuttering using the books reviewed in this article, regardless of your classroom having or not having a student who stutters.

Footnotes

- [1] From Ingham, R. J., & Siegel, G. M. (2002). Richard R. Martin— an appreciation of his career *Journal of Fluency Disorders*, 27(1), 87-91.
- [2] From https://sites.google.com/site/autismgames/

Dworzynski, K., Remington, A., Rijsdijk, F., Howell, P., & Plomin, R. (2007). Genetic etiology in cases of recovered and persistent stuttering in an unselected, longitudinal sample of young twins. *American Journal of Speech-Language Pathology*, 16(2), 169-178.

Katharina Dworzynski is a Senior Researcher in the Royal College of Physicians of King's College London, England. She and her colleagues: Anna Remington from the University College London, Frühling Rijsdijk, Peter Howell, and Robert Plomin from the King's College, London conducted research described in the article.

According to the authors, stuttering appears to be a disorder that has high heritability and little shared environment effect in early childhood and for recovered and persistent groups of

children, by the age 7. The clinical implications of the findings are discussed. According to the authors, most stuttering begins in childhood, and the majority of children recover by the early teenage years. Consequently, prevalence varies as a function of age: approximately 5% of preschool children are affected, but by the end of primary school (equivalent to junior high school in the United States) this percentage drops to 1% and remains at this level throughout life. The authors noted that, although the estimates for spontaneous remission in the preschool years are high, the reasons for such recovery are unknown. The authors stated that more than 75% of cases of stuttering report an onset of stuttering between ages 3 and 6 years, with almost no new cases being reported after age 12 years.

The teachers should be aware of the fact that a child may be prone to stuttering, when there is a strong family tendency. The current results showed that a large genetic component can be taken as support for that view. According to the article, a positive family history, and the fact that both early recovery and persistence are heritable, may play a role in risk assessment. The teacher of a child, who is at risk for developing stuttering, should pay attention to the possible environmental factors that can increase that risk. Modeling slow speech, not forcing such child to speak fast, and the other strategies to support a student who stutters can also be a good preventive measure for a child at risk

Flynn, T. W., & Louis, K. O. S. (2011). Changing adolescent attitudes toward stuttering. *Journal of fluency disorders*, 36(2), 110-121.

Kenneth O. St. Louis is a Professor of Speech-Language Pathology in the Department of Speech Pathology and Audiology, West Virginia University, Morgantown, WV, USA. He has B.S. in Hearing and Speech Science from Colorado State University, M.S. in Speech Pathology, from University of Michigan, and Ph.D. in Communication Disorders from University of Minnesota. A mostly recovered stutterer, he has devoted his career to the understanding and treatment of stuttering. As a West Virginia University faculty member, he teaches and carries out research. He has treated stuttering clients for 40 years. He is a Board Recognized Specialist and Mentor in Fluency Disorders and an author of *Living with Stuttering: Stories, Basics, Resources, and Hope.* Dr. Louis has presented and published widely on stuttering and cluttering. [1] His co-author Timothy W. Flynn is a moderate-to-severe stutterer, who has graduated from West Virginia University with a M.S. in Speech Pathology [2].

In the present work, the authors addressed the stigma attached to the disorder of stuttering. They stated that, according to research those who do not stutter typically view those who do in stereotypic and negative ways, such as assuming that a person who stutters is nervous, shy, introverted, passive, and prone to psychological problems. Growing evidence of the so-called "stuttering stereotype" has been found in 3–5 year-old and 6–13 year-old children as well as in adolescent students.

The authors conducted the experimental study where live oral or recorded video presentations on stuttering were delivered to high school students in order to determine the extent to which their attitudes toward stuttering could be improved. Oral live presentation was performed by a person who stutters. They found that high school students hold similar attitudes toward stuttering and stutterers as adults, and these attitudes can be improved, at least temporarily, by a presentation on stuttering but more via a live presentation than a professionally prepared video.

One important implication of these finding is that school teachers can use such live presentations to educate students about the disorder and, at the same time, to empower a presenter -- a student who stutters. However, a word of caution from the research is that before conducting such presentations teacher must first consult speech and language therapist of the person who stutters in order to make an informed decision and ask the person who stutters if he or she is ready to talk about his or her condition openly.

Footnotes:

- [1] From http://csd.wvu.edu/home/faculty and staff/stlouis k
- [2] From www.asha.org/.../1046... PDF of the article Combining Stuttering Modification and Contingent Management Successfully: One Client's Experience by Louis, K. O. S. and Flynn, T. W. (2009).

Guntupalli, V. K., Kalinowski, J., Nanjundeswaran, C., Saltuklaroglu, T., & Everhart, D. E. (2006). Psychophysiological responses of adults who do not stutter while listening to stuttering. *International Journal of Psychophysiology*, 62(1), 1-8.

The international team of researchers conducted this study. Vijaya K. Guntupalli, Ph. D. is a therapist who specializes in Speech-Language Pathology. [1] His colleague Joe Kalinowski Ph.D., CCC-SLP, has completed research and taught at the University of Connecticut, Haskins Laboratories, Dalhousie University, and at the East Carolina University. His research interests are: fluency inducement via external and internal mechanisms, speech naturalness before, during, and after therapy, and stuttering stereotypes. [2] Chaya D. Nanjundeswaran, Ph.D. received the Certification of Clinical Competence from Speech-Language-Hearing Association. Dr. Nanjundeswaran's research areas are: speech-language pathology, basic voice science, voice disorders and treatment, and disfluency disorders.[2] Tim Saltuklaroglu, Ph.D., is an Associate Professor at the Department of Audiology and Speech Pathology, at the University of Tennessee. His field specialties are: stuttering and speech perception. His research interest lies in the field of stuttering and processes of speech perception/production. Specifically, he is exploring the neural mechanisms that may be involved in eliciting stuttering or 'inhibit' its occurrences. His clinical research involves investigations into the most efficient and effective means of managing stuttering and tailoring therapy to meet individual needs. [3] With their colleague Erik D. Everhart, from the Department of Psychology of the East Carolina University, Greenville, NC, they concluded the present research in 2006.

According to the authors, numerous researchers have reported that people who stutter have been thought to be nervous, tense, shy, quiet, reticent, guarded, avoiding, introverted, afraid, passive, self-derogatory and more sensitive relative to people who do not stutter. These stereotypic attitudes towards stuttering were found to exist among various groups including students, teachers and professors, parents, speech-language clinicians, special educators, vocational rehabilitation counselors, people who stutter and their relatives and family members, and even among people who have never had any direct contact with a person who stutter.

These findings suggest that stuttering stereotypes are persistent and omnipresent in many populations. Reviewing hundreds of studies that investigated the differences between people who stutter and who do not stutter, researchers found that there is little conclusive evidence of any specific kind of character structure or broad-set of basic personality traits that is typical of stutterers as a group.

The teachers of students who stutter need to know that people who stutter are not more nervous, tense, or anxious, than people who do not stutter. Findings and information from this article can be used to enhance this knowledge by evidence. This study is the first quantitative research to suggest that viewing and listening to someone stutter can be emotionally arousing. The evidence strongly suggests that moderate to severe stuttering manifestations induces increased emotional arousal during passively viewing and listening to the stuttered speech sample in fluent adults. The study demonstrated that the stuttering manifestations can induce a pervasive feeling of

unpleasantness while witnessing stuttering in fluently speaking adults. People who do not stutter simply react differently to overt stuttering behaviors than they do to fluent speech. The authors suggest that the therapeutic response must incorporate this reality.

As a teacher of a student who stutters, you need to understand that the other students (and the teachers) can become emotionally aroused when presented with stuttering. According to the authors, the listeners are not to be blamed for their response as they are only reacting at a very basic physiological level to a speakers' atypical speech behavior. The teachers should be aware that increased emotional arousal and feelings of unpleasantness in listeners may severely impair the communicative capabilities of those who stutter as they sense those reactions in their listeners when they begin to stutter. The authors concluded that these stereotypes do not manifest because of what stuttering does to the stutterer but they appear to arise because of what stuttering does to the listener. However, being aware of this reality and understanding listeners' emotional and visceral responses can help a student who stutters to "develop coping strategies to deal with the host of potential social penalties associated with stuttering" (p. 6).

The authors also advised people who stutter to join support groups (e.g., National Stuttering Association, Stuttering Foundation of America, British Stammering Association, etc.) to connect to others who share the similar emotional experiences and that can be a source of counseling for those who stutter. As a teacher you can communicate this advice to your student who stutters, and help him or her to find such groups in your area.

Footnotes:

- [1] From: https://www.mnsu.edu/comdis/isad2/papers/kalinowski.html
- [2] From: https://www.mnsu.edu/comdis/ISAD3/papers/profin2.html
- $\hbox{[3] From: $\underline{http://www.uthsc.edu/health-professions/asp/faculty/saltuklaroglu.php}$}$

Howell, P., Davis, S., & Williams, R. (2008). Late childhood stuttering. *Journal of Speech, Language, and Hearing Research*, 51(3), 669-687.

Dr. Peter Howell is a Professor of Experimental Psychology in the Experimental Psychology Division of Psychology & Lang Sciences at the Department of Psychology University College, London. His current research involves investigating stuttering persistence and recovery. His research focuses on motor learning in people who stutter, development of a model for screening children for communication disorders, and the impact of language usage factors on stuttering. [1] With his colleagues from University College and City University, London, UK they conducted the present study in 2008.

They found that children who are bilingual usually stutter in both their languages (rather than just one). If a minority language alone was used in the home up to age 5, the chance of starting to stutter is lower and the recovery rate was higher than for children who acquire English as well as a minority language during this period. This difference did not affect educational attainment at the age 7 and 11. Children speaking an alternative language and English had an increased risk of stuttering and a lower chance of recovery from stuttering than children speaking an alternative language or English exclusively. The

authors found that recovery rate of children who spoke both, their native language and English, at home was 25%, whereas the children who spoke only their native language (whether English or other) at home had a 55% recovery rate (p. 685). The also authors stated that a disproportionate number of speakers of a language other than English are referred to stuttering clinics in the UK. The authors concluded that if children use a language other than English at home defer the time when they learn English, they are less likely to start stuttering and more likely to recover later in childhood. A final factor to note is that school performance was not affected with respect to whether the child stuttered or not. The later should be used in each and every discussion of stuttering, and all the educators should be aware of the fact, confirmed by this and other studies, that cognitive and learning ability of students are not affected by the condition of stuttering.

If you are an early childhood teacher of a child or children whose native language is other than English, you can use this information to encourage their parents to talk and read the books with their child in their native language. It could help their children to reduce risk of developing the condition, and to recover from the stuttering if they already have it. Stuttering in one language by bilingual children is rare (only 5.3% of the sample of 38 bilingual children stuttered in just one of their languages). As the teacher or a child who is English learner, make sure that he or she has speech disfluency in both languages. If this child only experiences disfluency when she or he speaks English, this may indicate that the child does not have stuttering, but rather have the difficulties to use a new language.

Footnotes: [1] From:

https://www.ucl.ac.uk/pals/research/experimental-psychology/person/peter-howell/

Iverach, L., & Rapee, R. M. (2014). Social anxiety disorder and stuttering: Current status and future directions. *Journal of fluency disorders*, 40, 69-82.

According to the Macquarie University website, Dr. Lisa Iverach is a research member of The Centre for Emotional Health (CEH), of Macquarie University, in Sidney, Australia. Her research interests include the relationship between stuttering and anxiety, and the mental health of people who stutter. She was a member of a team who developed the LidCombe Program that had a very high percentage of success in young children who were developing stuttering. Her colleague, Ronald Rapee is a Distinguished Professor at the Department of Psychology and Director of the Centre for Emotional Health at Macquarie University. Professor Rapee has established an international reputation for research in understanding and managing anxiety related problems across the lifespan. His research focuses on anxiety disorders and Cognitive Behavior Therapy.

The main point of the article is the importance of addressing social anxiety in children and adolescents who stutter in earlier stages, before their "subclinical fears and anxious associations" become clinically elevated (Iverach & Rapee, 2013, pg. 220). The authors stated that anxiety is one of the psychological concomitants of stuttering (concomitant is a phenomenon that naturally accompanies or follows something) and

that proper intervention may lessen negative consequences associated with stuttering and will improve quality of life and the engagement in everyday activities of people who stutter.

Iverach and Rapee (2013) supported their idea by reviewing and summarizing recent research findings that had demonstrated higher rates of social anxiety among people who stutter. However, the authors acknowledged that social anxiety disorder among children and adolescents who stutter require additional research. This article includes a comprehensive overview of previous research regarding anxiety and stuttering, including social anxiety disorder. It summarizes the approaches for the assessment and treatment of social anxiety in stuttering, including the efficacy of Cognitive Behavior Therapy.

One important implication for practice would be the shift in perception that the fear of speaking associated with stuttering is a natural consequence of distorted speech production, and thus this fear does not need to be seriously addressed. Such perception, which is incorrect according to the authors, still exists among some professionals in the field of speech disorders, emotional disorders, and education (including special education).

The teachers and parents should be aware that stuttering may be associated with social anxiety disorder and that proper intervention addressing anxiety may prevent numerous negative consequences of stuttering.

Langevin, M., & Prasad, N. N. (2012). A stuttering education and bullying awareness and prevention resource: A feasibility study. *Language, Speech, and Hearing Services In Schools*, 43(3), 344-358.

Dr. Marilyn Langevin from the University of Alberta, Edmonton, Canada is a Director of the Research Institute for Stuttering Treatment and Research (ISTAR). He is responsible for conducting, promoting and facilitating leading-edge research into the nature, social impact, treatment of stuttering and stuttering related clinical education, and developing and leading a research group centered at ISTAR. Dr. Langevin developed the Teasing and Bullying: Unacceptable Behaviour (TAB) bullying prevention program that also aims to educate students about stuttering. [1] Her colleague, Dr. Narasimha Prasad is an Associate Professor at University of Alberta, Edmonton, Canada in the Department of Mathematical and Statistical Sciences. His area of research includes: Sampling Theory, Discrete Multivariate Analysis, and Variance Component Models. Together they conducted a pretest–posttest study which examined the feasibility of using the TAB program to improve peer attitudes toward children who stutter and attitudes toward bullying.

The curriculum-level program for stuttering education and bullying awareness and prevention that they studied was titled *Teasing and Bullying: Unacceptable Behaviour* (TAB). The researchers surveyed 608 children who participated in the TAB prevention initiative. They found that TAB program has the potential to effect positive changes in

peer attitudes toward children who stutter and toward bullying. The authors suggest that the programs to educate public and students about stuttering should constitute the first layer of support provided to prevent the onset of bullying. The authors stated that there is a need in both the universal and individual level of intervention to improve attitudes toward all children who are victimized including children who have exceptionalities such as stuttering. According to the authors, children who stutter were less accepted socially than their typically fluent peers, less likely to be perceived as leaders, and were less often chosen as a friend. They also found that children who stutter often are the subject of negative peer attitudes and have difficulty "fitting in" at school. Findings suggested that a proportion of the peer group may be disinclined to associate with children who stutter and that they may be more inclined to react with frustration when listening to stuttered speech. A large body of literature has demonstrated that negative attitudes toward children and adults who stutter exist in a broad sector of the public.

Aa a teacher of a student(s) who stutter, you should be aware of and sensitive to these perceptions and attitudes in your classroom and school. You may also examine your own perceptions and possible biases and misconceptions toward people who stutter. The authors suggested talking with parents, speech pathologist, and other teachers so that you are all on the same page. The child who stutters is probably not the only one being bullied or teased in your school. As a teacher or a school administrator, you can consider implementation of the TAB curriculum in your school or classroom, or you can use some suggestions from this article for your own program. Those implications may include: the idea that the anti-bullying programs should include the classroom rules that serve to restructure the social environment and reduce the reinforcement of bullying consensus, and the suggestion that bullying interventions should mobilize the peer groups to support children who are victimized, to challenge bullying, and intervene on behalf of the victims.

Footnotes:

[1] From: http://www.istar.ualberta.ca/en/ISTAR%20Staff/MarilynLangevin.aspx

Logan, K. J., Mullins, M. S., & Jones, K. M. (2008). The depiction of stuttering in contemporary juvenile fiction: implications for clinical practice. *Psychology in the Schools*, 45(7), 609-626.

One of the authors, Kenneth Logan, Ph.D., CCC/SLP is a member of the Department of Communication Sciences and Disorders at the University of Florida, where he teaches, conducts research, and supervises clinical activities related to fluency disorders. He has presented many papers and authored a number of articles that deal with the nature and treatment of stuttering. His co-author, Kelly Jones, M.A., works as a speech-language pathologist in a pediatric private practice in Chapel Hill, NC. She received a Master's degree in Speech-Language Pathology from the University of Florida. [1] With their colleague Melody Saunders Mullins from the Health Center of Lake City, Lake City, FL, they conducted the present study in 2008.

The authors reviewed 29 contemporary juvenile fiction books featuring characters who stutter and assessed the presentation of stuttering-related content. Most stories were

presented as contemporary realistic fiction and several books represented other literary styles: fantasy (*Secret Heart*); historical fiction (*I Thought My Soul Would Rise and Fly; Little Women Next Door*), and allegory/fable (*Jeremy and the Hippo, The Adventures of Phil Carrot, The Angel Who Stammered*, and *Give Maggie a Chance*) (p. 613). They found that in the reviewed books most characters displayed attributes or accomplishments that offset their impairment. They also gave an overview of existing annotated guides, bibliographies, and reviews of books that featured a character who stuttered. According to the authors, the evidence-based practice of using books and other forms of printed media to address life challenges has been termed *bibliotherapy*, which is defined as "guidance in the solution of personal problems through directed reading" (p. 612). Although described as the therapeutic intervention, this practice can be used as an effective teaching strategy in the school settings. In addition to the list of books to be considered for use as an instructional tool, the authors included their suggestions for potential applications of the books in educational and interventional contexts.

As a teacher of a student who stutters, you can derive from this article the suggestions for this student to read and reflect on. In the stories many characters improved their social and communicative skills. However, make sure first to consult with the child's speech and language therapist if the book and strategy is consistent with the treatment and individual characteristics of the student who stutter.

At any grade level, you, as a teacher, can use the book from the list of fiction revised there, to discuss issues of bulling and teasing with your students. In the reviewed books, the characters who stuttered ranged in age from approximately 6 to17 years. According to the authors of this review, most books depicted negative listener responses to stuttering, including impatience, teasing, ridicule, and bullying. Before starting the classroom discussion, however, ask the student who stutters if he or she is willing to participate in such discussion.

Also, you can use the information from the article to avoid suggesting to your students reading certain books reviewed in this article, which contain incorrect or distorted information or convey the mistaken impression that stuttering is simply a symptom of emotional distress. References, synopses, page length, reading age level, and character age level information for the 29 books are presented in the Appendix to the article.

Footnotes:

[1] From: http://www.mnsu.edu/comdis/kuster/advisoryboard/advisors.html

Nye, C., Vanryckeghem, M., Schwartz, J. B., Herder, C., Turner, H. M., & Howard, C. (2013). Behavioral stuttering interventions for children and adolescents: *A systematic review and meta-analysis*. *Journal of Speech*, *Language*, *and Hearing Research*, 56(3), 921-932.

Chad Nue is a Professor and the Executive Director of the Center for Autism and Related Disabilities (CARD) at the University of Central Florida. He was named a fellow of the American Speech-Language-Hearing Association (ASHA) to recognize his

outstanding contributions to the profession. His colleague, Professor Martine Vanryckeghem, the University of Central Florida, received ASHA's annual Certificate of Recognition for Outstanding Contributions in International Achievement. She is the co-author of assessment tools for young and school-age children who stutter that are used throughout the world. [1] Carl L. Herder M.A., CCC-SLP is a licensed speech-language pathologist and holds a Certificate of Clinical Competence as awarded by the American Speech-Language Hearing Association. He has strong interest in fluency and fluency disorders while performing research under the direction of Dr. Nye and Dr. Vanryckeghem. He has published peer-reviewed articles in the *Journal of Fluency Disorders* and *Contemporary Issues in Communication Sciences and Disorders*. [2] With the group of their colleagues Dr. Nye and Dr. Vanryckeghem concluded the present study in 2013.

Conclusions of the present review and meta-analysis suggest that data to support the efficacy of behavioral intervention in children exists for a limited number of intervention strategies. Research found that the LidCombe program is the intervention approach that offers the best evidence for an effective intervention for children who stutter. However, this applies only to children under 6 years of age. The research also found that "while the intervention may result in a positive effect, the magnitude of the effect may be no greater for one type of intervention than for another."

The article includes the list with a general description of the existing treatment programs identified in the included studies (*Delayed Auditory Feedback* (DAF); *Gradual Increase In Linguistic Complexity of Utterance* (GILCU); *Speech Motor Training* (SMT); *Extended Length Of Utterance* (ELU); EMG; *Smooth Speech* (including ISS and HSS); and *LidCombe* program.

As a teacher you can benefit from having the general information about these treatments from this article, and knowing which treatment your student receives. For example, if your student uses the *Extended Length of Utterance* (ELU) intervention, in which the verbal output is gradually increased in length, you can model the use of shorter words while talking to him or her.

As a teacher of a child who stutters, you may find important the authors' statement "there is a need to recognize the different subtypes of individuals who stutter and deal with them in a differential way" (p. 923). In practice, it means that there is no single strategy which will work for each and every child who stutters. Consult child's speech and language therapist to be on the same page in understanding individual differences in the course of the disorder and in the current treatment.

Footnotes:

[1] From:

http://today.ucf.edu/ucf-faculty-students-shine-national-speech-language-hearing-convention/

[2] From: http://stutteringtreatment.org/aboutstaff.php

Yairi, E., Ambrose, N. G., Paden, E. P., & Throneburg, R. N. (1996). Predictive factors of persistence and recovery: Pathways of childhood stuttering. *Journal of Communication Disorders*, 29, 51-77.

Established in 1989 by Professor Ehud Yairi, the Illinois International Stuttering Research Program includes scholars from the United States of America and from several other countries who cooperate selectively in the conduct of a wide range of studies concerning stuttering. Its center is located at the University of Illinois at Urbana-Champaign. Dr. Yairi has "conducted research that has literally transformed our understanding of childhood stuttering." [1] Professor Nicoline Ambrose, Ph.D. is the current Director of Illinois International Stuttering Research Program. Dr. Ambrose is an Associate Professor of the Department of Speech and Hearing Science, at the University of Illinois. Dr. Ambrose's areas of interest are the genetics of stuttering and other speech, language, and hearing disorders, magnetic resonance imaging of stuttering, and evolution of human communication. [2] With their colleagues Paden and Throneburg they conducted a present study in 1996.

The authors stated that that approximately 40% of young children who stutter outgrow stuttering disorder, and that the clinical and research literature has suggested many estimates of spontaneous recovery. The authors listed several characteristics that are the signs of possible stuttering chronicity and means for early prediction of the course of stuttering. Their findings indicate that language indexes, nonverbal performance, phonological skills, genetics, and disfluency characteristics may all contribute to prediction of persistent (chronic) stuttering, emphasizing the multidimensionality of the disorder. The authors specified that gender differences exist in prevalence of the disorder: the male-to-female ratio increases from about 2:1 at the onset to 4:1 or 5:1 in older children and adults. The authors noted that boys begin stuttering, on average, 5 months later than girls do, and that later age of onset may be related to slower language/phonologic development.

As an early educator or elementary school teacher, you may need the information from the article if your student demonstrates some of the warning signs and you are considering issuing a referral. As the authors forewarn, the question of treatment for young children (especially boys) who begin stuttering later is more important as they approach school age. They noted that a preschool child who stutters may experience less social repercussions than a child in kindergarten or first grade. Further, you need to be aware, that "when there is less time between stuttering onset and school age, treatment decisions may need to be made sooner than with a younger child" (p. 72). At the same time if you consider referral, you may need to know that the high rate (70% or higher) of recovery exist during the early months of stuttering which continues until at least 15 months post-onset.

The findings suggest that although the chronic stutterers perform poorer than do the recovered stutterers on phonology, language, and nonverbal skills, the performance of both groups is unlikely to be below average. For teachers an important implication of this finding is that students who stutter have the same cognitive and language abilities as other students. The authors suggest that it may be beneficial to defer treatment for those

with few or no risk factors or mild stuttering that does not cause concern for either child or parents. Another suggestion from the article is that children, who stutter but not receive treatment, need periodic monitoring by an expert speech-language clinician. Footnotes:

[1] From: http://www.stutteringhelp.org/ehud-yairi-receives-award

[2] From: http://shs.illinois.edu/research/labs/stuttering/