Practical Treatment Strategies for Preschool and Young School-Age Children Who Stutter: Ages 2 to 6

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I. Most Important Fact #1: You can and should treat preschool children who stutter, and YOU are the best person to do it.

II. Purpose

A. To reduce your fears about working with very young children who stutter
   1. To help you realize that you won’t hurt the child or make stuttering worse through treatment
   2. To help you feel confident that you are using appropriate diagnosis and treatment strategies
   3. To help you respond to and minimize concerns of parents and others in a child’s environment

B. To discuss current strategies for helping preschool and young school-age children who stutter by…
   1. Improving children’s speech fluency through a variety of data-based techniques
   2. Reducing tension & struggle during stuttering so children can communicate freely and effortlessly
   3. Minimizing the development of negative reactions (e.g., fear, concern) to stuttering by the child
   4. Minimizing negative reactions of parents, teachers, peers, and others in the child’s environment

III. Where Do We Start? Defining Stuttering

A. The first question we often need to answer is whether the child is actually stuttering
   1. Many children go through a period when they exhibit an increased number of speech disruptions
   2. Not all of these disruptions are instances of stuttering, but we want to look carefully to make sure we don’t let kids who are at risk “fall through the cracks”
   3. To answer this question, we need a definition of stuttering so we know what to look for
   4. Unfortunately, numerous definitions have been offered over the years, and this has contributed to clinicians’ confusion about the diagnosis and treatment of the disorder

B. What Are Stuttering Behaviors?!?
   1. There are many definitions of stuttering, and many opinions about what should be counted as “stuttering behavior”
      a) “Stuttering” typically refers to certain types of speech disfluencies (e.g., sound or syllable repetitions, prolongations, blocks)
      b) Stuttering behaviors may also be accompanied by tension or struggle, but not always
2. Stuttering is often accompanied by a speaker’s feeling that he cannot continue speaking even though he knows exactly what he wants to say  
   a) Often referred to as a feeling of a “loss of control” (Perkins, 1990)  
   b) We must recognize the speaker’s perception when trying to identify stuttered events

C. So…Is This Child Stuttering? It is relatively easy to determine whether a preschooler is exhibiting stuttering behaviors. We do this by counting the disfluencies that the child exhibits. We also gather information from parents and others about those behaviors in other settings because…

D. Stuttering Varies from situation to situation, day to day, listener to listener. Thus, we cannot base decisions on measures taken in just one speaking situation

E. For preschool children, the question “Is this child stuttering?” isn’t as important as you think…  
   1. The parent would not have brought the child in if she hadn’t had some reason to be concerned about the child’s speech, AND preschool children can still recover even if they stutter severely (and…children who stutter mildly may still be at serious risk!)
   2. Initial Severity Does Not Predict Chronicity

F. The more important question is…Is This Child Likely to Continue Stuttering?  
   because most Preschool Children Recover from Stuttering  
   1. Studies show that as many as 75-80% of preschool children who stutter will recover  
      a) The majority of these children will recover within the first 6 to 12 months  
      b) Recovery is still observed up to 2, 3, and even 4 years post-onset  
   2. This recovery can be aided (with the help of treatment) or unaided (without any intervention at all)  
   3. This is good because we want children to recover, but it makes our job harder (There is no single factor that absolutely differentiates children who will recover from children who will persist)

G. For very young children who stutter, the primary goal of the diagnostic evaluation is to determine whether the child is at risk for continuing to stutter  
   1. If the child is at high risk, then treatment is definitely indicated  
   2. If the child is at low risk, then we may not need to be as urgent in our intervention, though I rarely send families home empty-handed!

H. Recent research has sought to determine what risk factors make it more or less likely that a child will recover from stuttering. These risk factors can be divided into two broad categories:  
   1. What’s going on within the child? (Etiologic factors that create disfluencies)  
   2. What’s going on within the child’s environment? (Contributing factors that exacerbate disfluencies)

I. Focusing on Etiology – What Causes Stuttering?  
   1. Most clinical researchers now believe that stuttering arises due to multiple risk factors (genetic & environmental factors including language abilities, motor abilities, temperament)  
   2. Many current theories of language formulation and speech production are based upon a set of related modules where messages are built through a series of interacting processes (Speech disfluencies represent disruptions in the planning or production process)  
   3. What’s Going On in the Child?  
      a) What are the child’s Language Skills? (You already know how to evaluate children’s language)  
      b) What are the child’s Motor Skills? (You already know how to evaluate young children’s speech sound production, though evaluating speech motor control may not be as easy)
c) **What is the child’s Temperament?** (You may not have used tests of temperament before, but you can assess reactivity and regulation ability through observation and parent interview)

4. So what are we looking for in the child?
   a) A mismatch between **Language Skills** and **Motor Skills** (This can be any type of mismatch – advanced language skills & typical/lower motor skills, advanced motor skills & typical/lower language skills, or anything)
   b) A sensitive/reactive **Temperament**
      1. **Reactivity** to what goes on within/around the child (fears, cries easily, strong reactions to noise)
      2. **Regulation** difficulty for changing responses (Difficulty stopping crying, changing activities)
   c) The etiology of stuttering is within the child…In other words, Stuttering Is Built-In! (it is a neurological dysfunction involving the child’s language skills, motor skills, & temperament systems)

J. What’s Going On in the Child’s Environment?

1. For years, people believed that stuttering was caused by the child’s environment
   a) The **diagnosogenic theory** stated that parental misdiagnosis of normal disfluencies led to increased concern about the child’s speech (“Stuttering begins in the ear of the listener, not the mouth of the speaker”)
   b) This theory was the source of the fear about drawing attention to stuttering and was the foundation for indirect treatment approaches
   c) But… **The diagnosogenic theory was WRONG! The child’s environment does not cause stuttering**

2. Still, this does not mean the environment plays no role in the child’s stuttering
   a) Parents are still extremely important in the child’s daily experience of the disorder and the child’s experiences contribute to the disorder
   b) We can help parents make changes that support the development of more fluent speech (*If the child weren’t susceptible to some change in his environment, then no treatment would work*)

3. So what are we looking for in the environment?
   a) A speech or language model that is too advanced (*This does not cause stuttering*, but it can make it harder for the child to communicate successfully)
      1. Children are more likely to stutter on longer, more complicated utterances (adult language model)
      2. Stuttering severity is related to dyadic speaking rate (the difference between the parent’s and child’s rate)
   b) Strong (fearful, anxious) reactions to stuttering on the part of parents or others
      (Again, this does not cause stuttering, but it may convey that stuttering should be feared)

K. What Causes Stuttering? Stuttering arises due to an interaction among several factors that are affected by both the child’s **genes** and the child’s **environment**

1. **Language Skills** for formulating messages
2. **Motor Skills** for producing rapid and precise speech
3. **Temperament** for reacting to disruptions in speech
4. *An interaction among factors contributes to the likelihood that the child will produce speech disfluencies and react to them*

L. What Risk Factors contribute to the likelihood that a child will continue stuttering?

1. Family history of stuttering
2. Preponderance of “stuttered” disfluencies
3. Time since onset > 6 months
4. Language / Motor mismatch
5. Child is aware of or concerned about disfluencies
6. Child is highly reactive to mistakes/disfluencies
7. Parental reactions are negative or fearful
8. Concomitant speech/language disorders
   And more… (Research is ongoing)
M. To Treat or Not To Treat…There is (still) a significant debate about when to recommend therapy for preschool children

1. Many preschoolers recover on their own, so some prefer to “wait and see.”
   a) I am not comfortable with this because I don’t want children to fall through the cracks

2. Because there is no simple way to determine who will “outgrow” stuttering…
   a) I prefer to help families that want help, even if it seems that the stuttering might ultimately resolve
   b) Of course, this does not mean that all children receive full, formal therapy…that’s what we’ll discuss next

N. Summary of the Evaluation. When evaluating preschool children who stutter, remember…

1. Determining whether they stutter is easy (and not particularly interesting); determining whether they are likely to continue stuttering is the question of interest, for that is what helps you decide if therapy is indicated

2. The evaluation is based on finding risk factors
   a) Etiologic factors (within the child)
   b) Contributing factors (within the environment)

IV. What’s Next? TREATMENT!

#7

A. What’s the Primary GOAL of Treatment for Preschool Children? To eliminate the stuttering!

B. How Do We Do That? There’s more than one way…

1. Treating Preschool Children Who Stutter – the OLD Way. Historically, treatment for preschool children who stutter has been indirect (Based on the (incorrect) diagnostogenic theory)
   a) No instructions were provided to the child about how to modify speech or improve speech fluency (In fact, no mention of speech was made at all, for fear that the child would “get worse” or “become aware of his stuttering”)
   b) This is old news! Times have changed!

2. Treating Preschool Children Who Stutter – Some NEW Ways. Over the past 20 years, researchers and clinicians have moved toward providing direct treatment for preschool stuttering
   a) Direct discussion of fluency-enhancing speech strategies and appropriate communication attitudes, combined with environmental modifications to minimize fluency disruptors
   b) Direct correction of stuttered speech and praise for fluent speech (Lidcombe program)

V. A Family-Focused Treatment Approach for Preschool Children Who Stutter


A. For young children who stutter, the first goal of therapy is to improve their fluency

B. Still, our therapy is not focused entirely or exclusively on fluency

   1. We also work to ensure that children develop effective communication skills
   2. We want to ensure that children develop appropriate attitudes toward their speaking and stuttering

C. Fortunately, we have several effective tools to help us accomplish these broad goals!
A Family-Focused Treatment Approach for Helping Preschool Children Who Stutter
(from Yaruss, Coleman, & Hammer, 2006, LSHSS)

VII. Part 1: Parent-Focused Treatment

A. Parent Communication Modifications: (A Fluency-Facilitating Environment). Parents can change their speech patterns to help the child achieve more fluent speech, e.g.:

1. Slower speaking rate (n o t t o o s l o w!)
   a) Easier interaction style. Increased pausing both within and between utterances

2. Less hurried daily pace / lifestyle (Less hectic scheduling of daily life activities, one-on-one time with child)

B. Focus on the Parents’ Communication Style…and the Child’s Fluency

1. Children do not slow when parents slow, and they do not pause when the parents pause
   a) Improvements in fluency are not related to changes in the child’s speaking style…
   b) Children just tend to become more fluent when parents change their speaking style

2. Why? Nobody performs at their best when under pressure to act quickly

C. Why Do We Do These Things? (and why should they work, if they do?)

1. The rationale is NOT because parents “talk too fast” or “demand too much”
   a) For years, researchers have sought a consistent difference in the parenting and communication styles of parents of children who stutter, compared to parents of children who do not stammer
   b) It’s just not there – parents of children who stutter are no faster or slower or more demanding or whatever than parents of children who do not stutter

2. The rationale for changing the environment IS based on the finding that when parents speak more slowly, children become more fluent
   a) The evidence for this is thin, and more research is needed… so, why do we do it?
3. I think the key variable is **time pressure**
   a) Slower rate, increased pausing, reduced activity – these aren’t as important as giving the child the time he needs to plan and produce speech
   b) As we minimize time pressure, we increase communication success

4. **The “Bucket Analogy”** identifies multiple factors involved in stuttering and helps parents understand the rationale for parent-focused aspects of treatment
   a) Water in the bucket represents risk factors contributing to the child’s stuttering
   b) Treatment aimed at modifying the communication environment addresses those aspects of the child’s water bucket *that can be modified*
      1. We can’t easily change the genetic component of stuttering, temperament, family conflicts, etc…
      2. We can help the parents reduce time pressures the child experiences in key situations
   c) The rationale for parent-focused treatment is simply to lower the water level where you can
   d) **In therapy, we change the things we can change!**

D. How Can We Help Parents Do All These Things?? (and do them consistently)

1. Rule #1: SHOW, not tell… You can’t just tell parents to slow down…
   a) They’ll try, but they can’t do it without help
   b) And if they can’t, they’ll feel (even more) guilty

2. You need to train them about how to slow down, when to slow down, and what to expect when they do slow down
   a) The same is true for all the other strategies we’re going to help the parents use in order to support their children’s speech development

VIII. **Helping Parents Facilitate Children’s Speech Fluency (“Parent-Child Training Program”)**

A. Goal is to help parents learn and use strategies for facilitating fluency at home and in other settings

B. Based on current evidence about factors that affect children’s speech fluency:
   1. Modifying aspects of daily interactions can help child achieve fluency in specific situations (even if the child does not directly change his own communication patterns)
   2. The more time a child spends communicating successfully, the less likely he is to develop severe stuttering

C. Approx. 6-to-8 session treatment program
   1. 2 to 4 parent-only sessions for counseling/education about stuttering and communication in general
      a) Helps parents understand stuttering; gives a chance for parents to discuss concerns
      b) Identifies risk factors (stressors) and helps parents understand the “water in the child’s bucket”
      c) Helps prepare parents for the communication modification sessions
   2. 3 parent-child sessions when parents learn and practice fluency-facilitating modifications as needed, e.g.:
      a) Reducing parents’ speaking rates (Easy Talking) or time pressures (Delaying response)
      b) Reducing demand for talking (if demand is high) and modifying questioning (if necessary)
      c) Providing a supportive communication environment
   3. 1 to 2 review and problem-solving sessions where the need for further treatment is assessed
      a) Parents can learn to incorporate helpful strategies and discuss follow-up plan
      b) “Refresher” handout facilitates generalization

D. Training is administered by itself or prior to more direct intervention with child or family
   1. Focus (for now) is on parent behaviors – we will discuss child-focused treatment next

E. More info available in the LSHSS article and on our website: [www.StutteringCenter.org](http://www.StutteringCenter.org)
IX. What about Talking to Kids about Stuttering?  
(Focusing on Parent and Child Acceptance)

A. Is it REALLY okay to talk about stuttering?  
YES! It really is okay to talk about stuttering.  
   1. Talking about stuttering (in a supportive way) will not make stuttering worse  
      a) The Lidcombe Program even encourages parents to point out a child’s disfluencies and ask them to  
         say the words again without “bumps” (more about that later)  
   2. It’s even okay to say the “S” word!

B. Parent-Child Focused Treatment: Maintaining Healthy Attitudes
   1. Concern: Children who stutter are at risk for developing negative communication attitudes  
   2. Solution: Help parents learn to...  
      a) Model appropriate attitudes and reactions  
      b) Listen to children’s concerns about speaking  
      c) Talk to children about stuttering  
   3. The goal is for the child to accept disfluencies as a normal part of learning to speak

C. When Do We Talk About Stuttering with Preschoolers?

<table>
<thead>
<tr>
<th>If the child is...</th>
<th>Then will we talk about stuttering?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Aware / Not Concerned</td>
<td>No</td>
</tr>
<tr>
<td>Aware but Not concerned</td>
<td>Maybe</td>
</tr>
<tr>
<td>Aware and Concerned</td>
<td>Yes!</td>
</tr>
</tbody>
</table>

X. Summary of Parent-Focused Components of Treatment

A. A short course of therapy designed to teach parents strategies they can use to facilitate children’s fluency at home and in other settings

B. Recall that this is not the entire treatment – it is just one component, the component that addresses parental communication patterns

C. Still, some children require no more that this – many children recover following only these parent-focused aspects of treatment

D. Next, we decide if more treatment is needed!

XI. Follow-Up

A. The key decision is how long to try this stuff before “giving up” and trying something else?
   1. If Indirect Therapy Is Going to Work, It Will Work Quickly
   2. Don’t Wait Too Long…I rarely stay only with parent-focused treatment for more than 3 months (6 sessions, every other week)...If the child isn’t better by then, move on!
XII. Part II: Child-Focused Treatment

A. Improving Fluency Directly
   1. If the child continues to stutter following the parent-focused treatment, then it’s time to begin direct child-focused treatment
   2. Now, the goals of treatment are the same as they would be for older children who stutter
      a) To improve the child’s fluency through direct modification of the child’s communication skills
      b) To ensure that the child develops and maintains appropriate communication attitudes

B. Communication Modifications
   1. Many techniques for improving fluency have been discussed; most focus on changing timing or tension
   2. Changing Timing: Reducing Speaking Rate, Pausing and Phrasing, Reducing Pace, Easy Starts
   3. Changing Tension: Light Contact, Easy Starts / Easing In, Pull-out / Easing Out, Cancellation

C. Changing Timing: Speaking Rate
   1. One of the most common techniques for improving fluency is reducing speaking rate
   2. “Turtle speech” can help children slow their rate to facilitate fluency
   3. I strongly prefer a more “natural” styles of slower speech (easy talking)

D. Changing Timing: Pausing
   1. Increase pause time -- the length of time between words and phrases
   2. Pauses should occur at natural locations, e.g., between sentences and phrases
   3. Pauses should not be so long that the child feels uncomfortable with the silence (~1 sec)
   4. It may take some practice for the child (and you) to develop comfort with silence

E. Changing Physical Tension
   1. Physical tension is a learned reaction to stuttering (or the anticipation of stuttering) (It is the child’s attempt to not stutter, but it rapidly becomes part of the stuttering pattern)
   2. Most of what you see on the surface is the child’s reaction to stuttering. (The “core” of stuttering is under the surface; Children must become desensitized to that core to reduce their reactions.)
   3. We can blend desensitization with tension reduction to help children stutter more easily

F. Helping the Child Develop Healthy Communication Attitudes
   1. Desensitization is just one part of therapy that supports the development of healthy attitudes
   2. Viewing stuttering in an open, matter-of-fact manner, in which the child is praised for his communication success (not just his fluency), is another way to ensure that the child learns that what he has to say is valuable and worthy -- even if it sometimes comes out bumpy
   3. Parents must come to terms with stuttering if they are going to be able to do this effectively

G. Can Little Kids Do All this Stuff? SURE! But, you may need to take your time.
XIII. Summary

A. When working with preschool children who stutter, the primary goal is to help them eliminate their stuttering.
   1. There are at least two research-supported approaches to treatment that help children do this.
   2. In addition to addressing fluency, treatment should ensure that the child develops appropriate communication attitudes.
      a) This will minimize the likelihood that he will struggle with his speech.
      b) It will prepare him for the future in case he does keep stuttering and needs more advanced treatment.

B. Most Important Fact #10a: You CAN Help Preschoolers Who Stutter

C. Most Important Fact #10b: YOU CAN Help Preschoolers Who Stutter

XIV. And…if it doesn’t work…remember the Most Important Facts for children who continue to stutter: Stuttering Is More Than Just Stuttering, and Treatment for Stuttering Is More Than Just Treatment for Stuttering

XV. Key Stuttering Organizations and Resources

A. Stuttering Foundation of America (SFA): www.stutteringhelp.org -- (800) 992-9392
   1. Publishes many helpful booklets and videotapes for clinicians, people who stutter, and their families.
   2. Provides numerous CE workshops for SLPs.

B. National Stuttering Association (NSA): www.WeStutter.org -- (800) We Stutter (937 8888)
   1. Publishes helpful booklets for children who stutter and their families.
   2. Supports more than 80 local chapters for adults who stutter, as well as several new local chapters for children and families nationwide.
   3. Provides CE workshops for SLPs as well as workshops for people who stutter and their families.
   4. Hosts an annual conference with 3-day youth program.

C. Friends: Association for Young People Who Stutter: www.friendswhostutter.org
   Hosts an annual conference bringing together people who stutter from around the country.

D. Our Time: www.ourtimestutter.org
   Nonprofit organization helping children who stutter through the arts.

E. American Board of Fluency and Fluency Disorders: www.StutteringSpecialists.org
   Certifies specialists in fluency disorders; provides information to consumers and professionals.

F. The Stuttering Home Page: www.stutteringhomepage.com
   Contains a tremendous amount of helpful information about stuttering, including essays about stuttering, course syllabi, and links to other stuttering pages.

G. Stuttering Therapy Resources, Inc.: www.StutteringTherapyResources.com
   A specialty publishing company (owned by the presenter and colleague Nina (Reardon) Reeves) dedicated to providing high-quality, affordable books and resources to help speech-language pathologists help people who stutter.
Some of the Presenter’s Recent Papers on Stuttering

I. Understanding Stuttering


II. Assessment and Diagnosis


III. Treatment – Preschool and School-age Children


Other Helpful Resources

(Note: This is just a selection. There are many resources available to help clinicians improve their confidence in helping people who stutter)


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Factors Potentially Associated with Childhood Stuttering

- Interpersonal Stressors
  - Unrealistic Demands
  - Major Life Changes
  - Family/Sibling Conflicts
  - Traumatic Events (?)

- Child Factors
  - Genetic Predisposition to Stutter
  - Language/Motor Mismatch
  - Highly Reactive Temperament
  - Concomitant Speech/Language Disorder

- Communicative Stressors
  - Negative Reactions to Stuttering
  - Fast-Paced, Demanding Questioning
  - Frequent Interruptions
  - Competition for Talking Time
  - Rapid Rate of Conversation

Original version published in:

"Non-Stuttered" Disfluencies
Hesitations (pause)
Interjections (um, uh, er)
Revisions ("I want-I need that")
Repetitions of phrases ("I want- I want that")
Repetitions of multisyllabic whole words ("mommy-mommy-mommy let’s go.")
Repetitions of monosyllabic whole words ("I-I-I want to go.")

Disfluencies occur more frequently
Reactions to disfluencies increase
Tension or struggle increases
Duration (length) of disfluencies increases
Secondary characteristics (eye blinks, head movements, etc.)

"Stuttered" Disfluencies
Repetitions of sounds or syllables ("li-li-like this")
Prolongations ("lllllike this")
Blocks ("l---ike this")

NOTE: "Non-stuttered" disfluencies can be used to avoid or postpone stuttering (e.g., “I um, you know, uh I want to um, g-g-g-o with you.”)