



# TREATMENT STRATEGIES FOR CHILDHOOD FLUENCY DISORDERS

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## – **Fluency**

- Continuity, Smoothness, Rate, Effort of Speech

### **Stuttering**

- Most common fluency disorder
- Characterized by repetitions (sounds, syllables, words, phrases), sound prolongations, blocks, interjections, revisions
- Negatively impact rate and rhythm of speech
- Secondary Characteristics: physical tensions, negative reactions, avoidance behaviors

### **Cluttering**

- Rapid and/or irregular articulatory rate
- Higher than average frequency of normal disfluencies (interjections, revisions, and syllable/phrase repetition)
- Reduced Intelligibility due to exaggerated coarticulation (deletion of syllables or sounds in multi-syllabic words) with indistinct articulation



REMEMBER: WHITNEY DID A  
WONDERFUL PRESENTATION ALL  
ABOUT CLUTTERING VS.  
STUTTERING

# Keep in Mind:

- Tends to be a higher incidence rate with pre-school age children
  - 8.8% by 3 years of age (Reilly et al., 2009)
  - 11% by 4 years of age (Reilly et al., 2013)
  - Many of these children recover, but some continue with fluency difficulties
- Incidence of stuttering in young boys is approximately twice that of girls (Yairi & Ambrose, 1999), although some studies report a smaller ratio of 1.6:1.0 (Kloth, Janssen, Kraaimaat, & Brtten, 1995; Mansson, 2000)
- Unclear relationship between race or ethnicity and prevalence of stuttering in children
  - Some studies show a link, others do not (Boyle et al., 2011; Proctor, Yairi, Duff, & Zhang, 2008)



### *High Risk Factors for Pervasive Developmental Stuttering*

Family history of stuttering

Child is male gender

Onset after three years, five months

Stuttering longer than 6 months to 1 year

Presence & Higher proportion of Stutter-Like Disfluencies compared to Other Disfluencies

- Part-word repetitions, single-syllable word repetitions, prolongations and blocks
- Multiple units of repetitions, faster units, shorter pause duration between repeated units
- Secondary stuttering behaviors (ie. Facial grimaces, body movements, etc.)

Sensitive temperament profile: higher level of reactivity, lower sensory threshold, other

Concerns/diagnosis regarding: language abilities, phonology, articulation, overall development, ADHD, anxiety, Tourette Syndrome, OCD, Autism, depression or learning disabilities

Parents/Caregivers anxious, reacting negatively to child's problem communicating

Child demonstrates frustration, negative reactions to problems

### *Low Risk Factors for Pervasive Developmental Stuttering*

**NO** Family history of stuttering

Child is female gender

Onset before three years, five months

Stuttering less than 6 months

Presence of Other Disfluencies within normal frequency;  
Stutter-Like Disfluencies not present (less than 10% based on 300 syllable speech sample)

- Unfinished words
- Revisions
- Interjections
- Whole word repetitions (less than 4)
- Phrase repetitions

Less sensitive profile

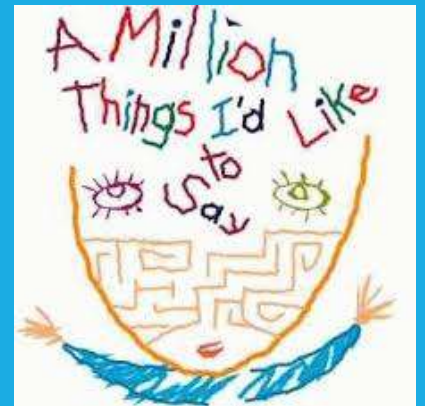
No other concerns

Minimal or no anxiety regarding problem

Child not demonstrating frustration

## Treatment approaches should be:

- Individualized based on child and family considerations
- Consist of parent-focused and child-focused strategies
- 3 types of treatment approaches
  - Indirect
  - Direct
  - Operant
- Overall goal of treatment:
  - Eliminate, greatly reduce, or help children manage their stuttering and not develop negative emotional reactions related to their stuttering



# Indirect (less popular as a sole treatment method)

- **Goal:** help parents identify and learn to use strategies that might help facilitate their child's fluency
- Based on the idea that children's speech is influenced by their speaking abilities and environment
- Main features include:
  - Counseling families about how to make changes in their own speech
    - Simplifying parent utterances to the level of the child
    - Continue turn taking and limit interruptions
    - Recasting/rephrasing to model fluent speech
    - Reducing speech rate
  - Counseling families about how to make changes in their child's environment
  - Building the child's awareness of their speech



# Direct

- **Goal:** train fluency directly, first at the word level and then gradually increasing complexity
- Parental involvement is important
- Provide vocabulary to help children be able to discuss fluency
- Includes practicing and implementing speech modification and stuttering modification strategies to reduce disfluency, rate, physical tension, and secondary behaviors
- Target Communication Attitudes

# Operant

- Uses principles of Skinner's Operant Conditioning
- Reinforce the child's fluent speech
- Redirect disfluent speech
- Parents are trained to provide verbal responses based on whether or not the child's speech is fluent or disfluent
  - "I like how smooth that was."

# Lidcombe Program



- Behavioral treatment for children below the age of 6 with disfluencies
- Treatment is administered by the caregiver in child's everyday environment
- Caregivers learn how to do the treatment during weekly visits to SLP
  - Lots of caregiver coaching (e.g., specific praise, requesting self-evaluation "was that smooth?")
- Caregivers learn to give effective feedback and rate their child's stuttering each day with a 0-9 point scale
- 2 Stages to this Program
  - Stage 1: Caregiver is the main treatment implementer on a daily basis. Caregiver and child attend S/L therapy once a week for caregiver coaching
  - Stage 2: Maintenance Stage begins when disfluencies disappear or are at a low frequency. The main aim is to prevent the disfluencies from increasing in frequency
- For more information: <http://www.lidcombeprogram.org/>

# Therapy Ideas

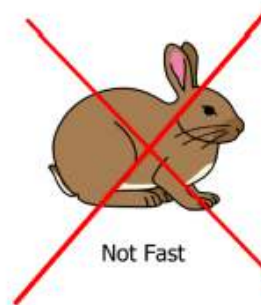
- Target **Easy Onsets**:
  - Ski Slope Visual
  - Race cars going over a hill or ramp
- Target **Slow Speech Rate**
  - Fast and slow animal
  - Fast and slow car
  - w/e the child preferences are
  - E.g. Turtle vs rabbit talk



Remember to use your turtle talk



Talk Slow and Clear



Not Fast



Smooth speech

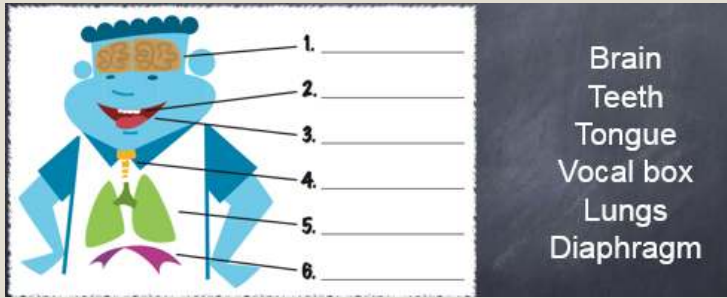


Bumpy speech

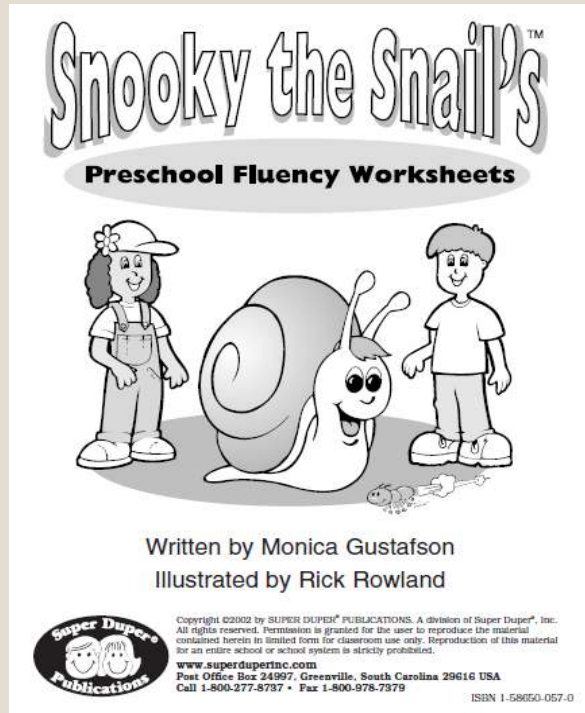


## Bumpy vs Smooth Speech

- Introduce the concept of bumpy vs. smooth, practice identifying and implementing this concept
- Use visuals and manipulatives with client preferences (car/road, surfer/waves)



- Review of the **Speech Machine/Speech Helpers** to encourage awareness and provide vocabulary to talk about fluency



- **Fluency worksheets** to discuss importance of “slow and easy” at the word, phrase, sentence, then conversation level
- E.g., Snooky the Snail's Preschool Fluency Worksheets
  - Gustafson, M., & Rowland, R. (2002). *Snooky the snails preschool fluency worksheets*. Greenville, SC: Super Duper School.

## Example Children's Books about Stuttering

- *Little Ballet Boy* by Sohel Bagai
  - A boy with a stutter goes from being the boy who stuttered to the boy who could dance
- *A Boy and His Jaguar* by Alan Rabinowitz and Catia Chien
  - Story about Alan, who is only fluent when speaking or singing to animals at the Bronx zoo



# Resources

- The Stuttering Foundation has great information for parents and professionals
  - Has great resources regarding disfluencies in bilingual children as well
  - <https://www.stutteringhelp.org/>
- National Stuttering Association
  - <https://westutter.org/>
- Stuttering Therapy Resources, Inc.
  - <https://www.stutteringtherapyresources.com/>
- American Institute for Stuttering – Preschoolers
  - <https://stutteringtreatment.org/preschoolers/>



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