The Pre-School Child Who Stutters

Patricia Zebrowski, Ph.D.
University of Iowa

CONSIDER STUTTERING WITHIN THE CONTEXT OF FLUENCY AND DISFLUENCY

FLUENCY:
The smooth transitioning between sounds, syllables, and words

DISFLUENCY:
A disruption in this process

CHARACTERIZING DISFLUENT BEHAVIOR

BETWEEN-WORD or Other Disfluencies (ODs)

• Interjections
• Revisions
• Phrase repetitions
CHARACTERIZING DISFLUENT BEHAVIOR, (cont.)

WITHIN-WORD or Stuttering-Like Disfluencies (SLDs)

- Sound/syllable repetitions
- Sound prolongations (audible and inaudible)
- Monosyllabic whole-word repetitions

Disfluency and Stuttering reflect a disruption in the smooth transitioning between sounds, syllables, and words.

STUTTERING IS A FORM OF SPEECH DISFLUENCY CHARACTERIZED BY A RELATIVELY HIGH PROPORTION OF WITHIN-WORD SPEECH DISFLUENCIES AND ASSOCIATED BEHAVIORS
We suspect that a child is either stuttering or at risk for developing a stuttering problem if (s)he meets BOTH of the following criteria:

- Produces at least three within-word or stuttering-like speech disfluencies (SLDs) per 100 words of conversational speech (i.e., sound/syllable repetitions, sound prolongations, monosyllabic whole-word repetitions)

- Parents and/or other people in the child’s environment express concern that the child either stutters or is a stutterer.

**Patterns of Unassisted Recovery**

- Probability of recovery highest from 6-36 months post onset

- Majority of children recover within 12-24 months post onset

- Period of recovery marked by steady decrease in sound/syllable and word repetitions and prolonged sounds over time, beginning shortly after onset

- Relatively brief beginning and ascending phase, and a relatively long declining phase

- Subgroup of children presenting with “severe” stuttering at onset, with frequency of behaviors peaking at 2-3 months post onset and full recovery seen by 6-12 months
Recovery Predictors

- Described by Yairi and associates (1992, 1999, 2005), and others (Conture, 2004; Pellowski & Conture, 2002; Zebrowski, 1991)
- Onset before age 3
- Female
- Measurable decrease in sound/syllable and word repetitions, and sound prolongations, overtime, observed relatively soon post-onset

---

- No family history of stuttering or a family history of recovery
- No coexisting phonological problems (and possibly language and cognitive problems?)

****ALL ARE PROBABILITY INDICATORS****

---

Should Therapy Be “Direct” or “Indirect?”
Direct:
Teaching the child how to deliberately and overtly recognize and change speech behaviors

“Speak more Fluently” vs “Stutter more Fluently” or Both

Parents’ request for “cancellation” of disfluency, and subsequent reinforcement of fluency (e.g. Lidcombe program, after Onslow and associates).

Indirect:
Monitoring
Parent counseling

Providing models of specific speech characteristics with NO overt or deliberate attention paid to the child’s speech or speech disfluency.

Treatment Options for Preschool Children: Direct

* Easy or “Smooth” Speech
  * Smooth, physically relaxed speech initiation. “Stretches” or “smooth starts”
  * “Light” or “soft” touches (i.e. light articulatory contact)
• “Stretched” sounds (esp. vowels)
• Connect “all the sounds”
• Taught individually or ‘bundled’ as one strategy (i.e. “turtle talk”)
• “Easy” speech strategies target time and tension

Parent Information Sharing and Counseling

---

**Lidcombe**
(Onslow, Packman & Harrison, 2003)


Parent provides treatment following training by clinician

Spontaneous fluency is reinforced, instances of stuttering are highlighted through parent request to “say it easy.” (Similar to ‘cancellation?’) Ratio of praise to request for “do-over” @ 5:1

---

**Lidcombe (cont’d)**

Parent provides treatment in daily intervals of increasing length and communicative complexity.

Parents taught to rate stuttering frequency and severity, and keep daily ratings of each for self and clinician.
Treatment Options for Preschool Children: Indirect

Manipulate Verbal Environment of Child

- Rooted in Capacity/Demands Model

- Clinician structures therapy session to increase probability that child will produce spontaneous fluency through:
  - Modeling smooth speech, turn-taking, and increased duration of turn-switching pauses
  - “Rules for Talking”: Listen, Don’t Talk, Wait

- Constraining child’s output through activities, moving hierarchically through levels of linguistic complexity
  - Provide multiple opportunities for spontaneous fluency in a concentrated period of time
  - Reinforce participation, not quality of speech
  - “Perfect practice” makes perfect
Teaching Parents to Manipulate Verbal and Nonverbal Environment of Child

- Parent decreases speaking rate through phrasing and pausing
- Increase duration of turn-switching pauses
- Turn-taking behaviors in conversation
- Simple language; avoid “language bombardment” or “over-talking”.

- Parent reduces “time pressure” in daily routine, and “communicative time pressure” in verbal interaction with child
- Parent taught to observe relationship between child “stressors” (internal and external) and fluency, and modifies/manipulates when possible

Parent-Child Interaction Therapy (PCIT)
(Millard, Nicholas & Cook, 2008)

- Rooted in “multifactorial” model of early stuttering
- Collaborative, flexible approach tailored to individual family
- Stuttering is openly discussed and acknowledged with child
- Tools based on (a) child assessment, (b) parent interview, and (c) guided observation of videotaped parent-child play to determine physiological, linguistic, environmental or psychological factors
Parent-Child Interaction Therapy (PCIT)  
(Millard, Nicholas & Cook, 2008)

Session 1
- Clinician feedback from evaluation and ‘discovery’ while watching videotape.
- Management and Interaction tools are chosen.
- “Special Time” is negotiated.

Parent-Child Interaction Therapy (PCIT)  
(Millard, Nicholas & Cook, 2008)

Session 1
Management Tools:
Managing child and parent anxiety about stuttering
Coping with sensitive children
Confidence building
Behavior management (e.g. sleeping, eating, turn-taking, tantrums, etc.)

Parent-Child Interaction Therapy (PCIT)  
(Millard, Nicholas & Cook, 2008)

Session 1
Interaction Tools:
Reduce speech rate;
Increase duration of turn-taking pauses;
Reduce amount of talking and length/complexity of utterances;
Decrease language demands (i.e. vocabulary, grammar, amount of talking, “performance” requests)
Parent-Child Interaction Therapy (PCIT) (Millard, Nicholas & Cook, 2008)

Session 1

Interaction Tools During Play:

Follow child's lead during play and verbal interaction (less physically active role);
Reduce instructions and questions (use comments instead);
Maintain attention with eye contact, showing interest, encouragement and praise
Reduce language demands (i.e. vocabulary, grammar, amount of talking, “performance” requests)

Session 2

Videotape parent-child play and observe use of selected interaction tools and their effectiveness;
Parent taught to observe relationship between child “stressors” (internal and external) and fluency, and modifies/manipulates when possible
Provide feedback sheets and schedule weekly parent visits

Parent-Child Fluency Group

Two groups meeting simultaneously and together

Purpose is to treat childhood stuttering by involving both the child and the child’s parents