The Evidence for the Lidcombe Program of Early Stuttering Intervention

Overview

- Theoretical framework
- Overview of the approach
- Timing for intervention
- Rationale for therapy goals
- Measuring progress
- Research evidence and clinical outcomes
- Future research needs for preschool children

Theoretical Framework

- The LP is a behavioral treatment developed empirically, rather than from a particular view of the nature/cause of stuttering
  - Initiall motivated by the theoretical perspective of stuttering that it responds as an operant
  - No assumptions regarding the nature of stuttering
No current consensus regarding the cause of stuttering (Packman & Attanasio, 2007)

Empirical evidence that stuttering in young children responds to behavior therapy (Martin, Kuhl & Haroldson, 1972; Reed & Godden, 1977)

Rationale for this treatment based on operant research (see Harrison & Onslow, 2009)

Theoretical Assumptions

Assumption 1: Stuttering in young children behaves like an operant and is amenable to response contingent stimulation.

...not to be confused with the notion that stuttering is an operant

Assumption 2: The identification of a cause is not necessary to modify a resulting behavior

LP is then based on principles of learning that are documented in the psychology research literature
The Lidcombe Program
Onslow et al., 2003

- Behavioral treatment for preschool age CWS
- Evidence of treatment efficacy
- Parents trained to provide verbal contingencies for stutter-free speech and stuttering
- A two-stage treatment program

Overview of the LP

- Daily severity ratings to show progress at home (Parents)
- Collection of %SS at start of clinic visit (SLP)
- Provide verbal contingencies in structured/unstructured conversations (Parents)
- Completion of Stage 1 and Stage 2

Lidcombe Program

STAGE 1
- Weekly clinic visits
- Clinician trains parent to do measures & treatment
- Parent provides feedback in structured/unstructured treatment conversations

STAGE 2
- Parent assumes responsibility for treatment
- Time between clinic visits increases
- Feedback fades systematically
- Failure to meet speech criteria is acted upon immediately

< 1% SS, SR 1, occasional SR 2 for 3 consecutive weeks
Parent’s Verbal Contingencies for Stutter-free Speech

- Acknowledgement: “That was smooth talking”
- Praise: “Wow, great talking!”
- Request for self-evaluation: “Did you say that smoothly?”

Parent’s Verbal Contingencies for Unambiguous Stuttering

- Acknowledgement: “There was a bump there”
- Request self-correction: “Can you say [stuttered word, phrase] again?”
### Guidelines to Determine the Timing for Intervention  
(Harrison & Onslow 2009)

- When making decisions about the timing of early intervention with the LP, the clinician considers
  - the child’s potential for natural recovery
  - empirical evidence about children’s responsiveness to LP treatment

### Consider delaying LP treatment if...

- Child shows signs of natural recovery
  - e.g., decreasing severity / frequency of stuttering
- <6 months from onset of stuttering
- Child and family show no signs of distress related to stuttering
- No other communication disorder, health or behavioral issues

### Consider starting LP treatment when...

- >6 months since onset of stuttering and shows no signs of natural recovery
- Child & family show signs of distress related to stuttering
- Other communication disorder, health or behavioral issues

Ideally begin in time to complete Stage 1 before school entry
Rationale for therapy goals

- Studies show potential of operant methods to influence stuttered speech
  - Martin, Kuhl & Haroldson (1972): puppets
  - Reed & Godden (1977): ‘slow down’

- LP: parents provide verbal contingencies to reduce stuttering in preschool children

Challenge in Treatment

- Maintain program integrity while taking into account individual client/family differences
  - Linguistic diversity
  - Other communication/medical diagnoses
  - Sensitive/shy children
  - Working/busy/separated parents
  - Twins who both stutter
  - Parent who stutters

Measuring progress/tracking outcomes

- Two measures of stuttering severity
  - %SS in-clinic during conversation with the child
  - SR using a 10 point scale
    - 1 = no stuttering, 2 = mild stuttering, 10 = severe stuttering
  - Programmed criteria-based Stage 2

- Parent feedback/satisfaction
- Long term outcomes
Evidence Based Practice (Dollaghan, 2007)

- Consider:
  - Relevant treatment outcome data
  - Clinician's experience
  - Client's preferences

Outcome Data: Clinical Trials Evidence

- First Phase 1 trial: Onslow et al (1990)
- Randomized controlled trial: Jones et al (2005)
- Long term follow up: Miller & Guitar (2009)
- Phase 1 trial School Age: Koushik et al (accepted)

Treatment Process Research

- Benchmarks for Stage 1: Jones et al (2000); Kingston et al (2003); Koushik et al (submitted); Findlay & Shenker (in preparation)
- Variations in Service Delivery of the LP: Koushik (in preparation)
Parent Experience

- Parents’ experience of the Lidcombe Program (Haynow, 2009)
- Parent satisfaction ratings
  - Exit interviews and follow up
  - Surveys
  - Unsolicited feedback

Parent Satisfaction

N. leads a stutter-free life and is a happy, healthy and confident 9 year old. We sometimes talk about his ‘bumpy’ words when we look back at pictures, although I don’t think he really remembers. It is just a cute story to him, which makes mum hug him. I just wanted to let you know that six years on all is well. Every time I watch his school play or hear him read aloud or even listen to him argue with his brother I am reminded that you gave him the gift of speech!

Future Research

- Extend treatment to older children
- Long term follow up
- Treatment effectiveness when LP is used by non researchers, generalist clinicians
- Treatment time and variables affecting it
- Variations in service delivery
References

