

The Evidence for the Lidcombe Program of Early Stuttering Intervention
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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
- Initially motivated by the theoretical perspective of stuttering that it responds as an operant
- No assumptions regarding the nature of stuttering

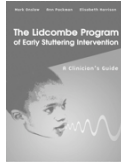
- No current consensus regarding the cause of stuttering (Packman & Altanasio, 2007)
- Empirical evidence that stuttering in young children responds to behavior therapy (Martin, Kuhl & Haroldson, 1972; Reed & Godden, 1977)
- Rationale for this treatment based on operant research (see Harrison & Onslow, 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

- ### Theoretical Assumptions
- 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

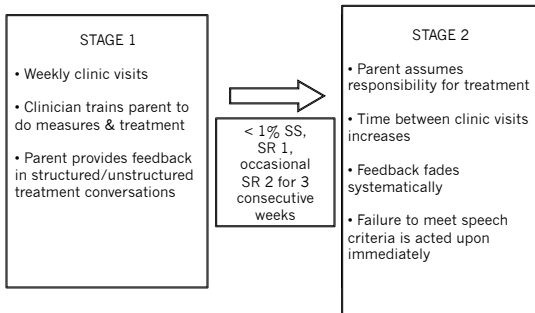
- Behavioral treatment for preschool age CWS
- Evidence of treatment efficacy
- Parents trained to provide verbal contingencies for stutter-free speech and stuttering
- A two-stage treatment program



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



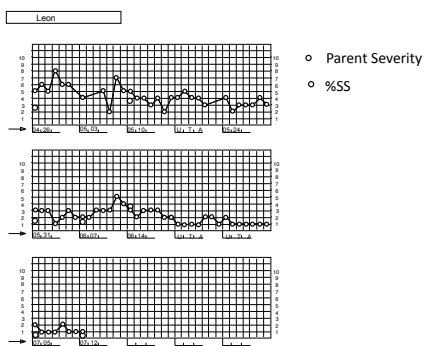
Parent's Verbal Contingencies for Stutter-free Speech

- 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?"

The Lidcombe Program
Stuttering Measures



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

Current Best Evidence

EBP

Clinical Expertise Client/Patient Values

Outcome Data: Clinical Trials Evidence

- First Phase 1 trial: Onslow et al (1990)
- Long term outcome: Lincoln et al (1997)
- Tele-health case study: Harrison et al (1999)
- Randomized controlled trial: Jones et al (2005)
- Telehealth trial: Lewis et al (2008)
- Long term follow up: Jones et al (2008)
- Long term follow-up: Miller & Guitar (2009)
- Phase 1 trial School Age: Koushik et al (accepted)

Treatment Process Research

- Language function after treatment: Bonelli et al (2000); Lattermann et al (2005); Guttmann et al (2006) Rousseau et al (2007)
- 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)
- Monitoring for Risk: Shenker et al (in preparation)

Parent Experience

- Parents' experience of the Lidcombe Program (Hayhow, 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

- Harrison, E. & Onslow, M. (2009). The Lidcombe Program for preschool children who stutter. In Guitar, B. & McCauley, R. (Eds.). Treatment of Stuttering: Established and emerging interventions.
- Jones et al (2005). Randomized controlled trial of the Lidcombe Program of early stuttering intervention. British Medical Journal, 331, 7518
- Hayhow, R. (2009). Parent's experience of the Lidcombe Program of early stuttering intervention. International Journal of Speech Language Pathology, 11(1), 26-33.
