

Evidence-based Language Intervention Approaches for Young Late Talkers

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Evidence-based Decisions

External Evidence

EBP

Clinical Expertise

Client Values

Intervention Options

No Intervention:
Watch and See

General Language
Stimulation

Focused Language
Stimulation

Milieu Teaching

Changing Modalities:
Augmentative and
Alternative
Communication

Watch and See

- ❖ Aggressively monitor language development
- ❖ Not for everyone – best for children for whom:
 - ❖ Only concern is expressive language,
 - ❖ There are no issues with speech intelligibility,
 - ❖ There are not high risks for language impairment, and
 - ❖ Language skills continue to develop
- ❖ External Evidence
 - ❖ Weak evidence: Longitudinal observations

Watch and See

- ❖ Girolametto, L., Wiigs, M., Smyth, R., Weitzman, E., & Pearce, P.S. (2001). Children with a history of expressive vocabulary delay: Outcomes at 5 years of age. *American Journal of Speech-Language Pathology*, 10(4), 358–369.
- ❖ Paul, R. (1996). Clinical implications of the natural history of slow expressive language development. *American Journal of Speech-Language Pathology*, 5(2), 5–21.
- ❖ Rescorla, L. (2002). Language and reading outcomes to age 9 in late-talking toddlers. *Journal of Speech, Language, and Hearing Research*, 45(2), 360–371.
- ❖ Thal, D.J., Bates, E., Goodman, J., & Jahn Samilo, J. (1997). Continuity of language abilities: An exploratory study of late- and early-talking toddlers. *Developmental Neuropsychology*, 13(3), 239–273.
- ❖ Whitehurst, G.J., Fischel, J.E., Lonigan, C.J., Valdez Menchaca, M.C., Arnold, D.S., & Smith, M. (1991). Treatment of early expressive language delay: If, when, and how. *Topics in Language Disorders*, 11(4), 55–68.

General Stimulation

- ❖ Create a rich language environment of developmentally appropriate language, but no specific targets
- ❖ Highly responsive communication partners (clinician or parent):
 - ❖ Follow child's lead
 - ❖ Parallel talk
 - ❖ Recasts
- ❖ External evidence
 - ❖ Moderately strong for both clinician and parent agents

General Stimulation

- ❖ Boyd, R.M. (1980). Language intervention for grade one children. *Language, Speech, and Hearing Services in Schools, 11*(1), 30–40.
- ❖ Robertson, S.B., & Ellis Weismer, S. (1999). Effects of treatment on linguistic and social skills in toddlers with delayed language development. *Journal of Speech, Language, and Hearing Research, 42*(5), 1234–1248.
- ❖ Weiss, R.S. (1981). INREAL intervention for language handicapped and bilingual children. *Journal of Early Intervention, 4*(1), 40–51.
- ❖ Baxendale, J., & Hesketh, A. (2003). Comparison of the effectiveness of the Hanen Parent Programme and traditional clinic therapy. *International Journal of Language and Communication Disorders, 38*(4), 397–415.
- ❖ Buschmann, A., Jooss, B., Rupp, A., Feldhusen, F., Pietz, J., & Philippi, H. (2009). Parent based language intervention for 2-year-old children with specific expressive language delay: A randomised controlled trial. *Archives of Disease in Childhood, 94*, 110–116.

Focused Stimulation

- ❖ Create a rich, focused language environment of developmentally appropriate language with specific language targets:
 - ❖ Words
 - ❖ Grammatical constructions
 - ❖ Other communication skills
- ❖ External evidence
 - ❖ Strong for parent-implemented

Focused Stimulation

- ❖ Girolametto, L., Pearce, P.S., & Weitzman, E. (1996). Interactive focused stimulation for toddlers with expressive vocabulary delays. *Journal of Speech and Hearing Research, 39*(6), 1274–1283.
- ❖ Girolametto, L., Pearce, P.S., & Weitzman, E. (1997). Effects of lexical intervention on the phonology of late talkers. *Journal of Speech, Language, and Hearing Research, 40*(2), 338–348.
- ❖ Girolametto, L., Wiigs, M., Smyth, R., Weitzman, E., & Pearce, P.S. (2001). Children with a history of expressive vocabulary delay: Outcomes at 5 years of age. *American Journal of Speech-Language Pathology, 10*(4), 358–369.

Milieu Teaching

- ❖ Similar to focused stimulation, with addition of the expectation for the child to produce target form through:
 - ❖ Prompts
 - ❖ Models
 - ❖ Request to imitate
- ❖ External evidence
 - ❖ Moderately-strong based on single subject designed study and randomized experimental designs

Milieu Teaching

- ❖ Ellis Weismer, S., Murray Branch, J., & Miller, J.F. (1993). Comparison of two methods for promoting productive vocabulary in late talkers. *Journal of Speech and Hearing Research, 36*(5), 1037–1050.
- ❖ Kouri, T.A. (2005). Lexical training through modeling and elicitation procedures with late talkers who have specific language impairment and developmental delays. *Journal of Speech, Language, and Hearing Research, 48*(1), 157–171.

AAC

- ❖ Focus on sign and graphic modes of communication may lead to increases in verbal communication
- ❖ For example, using MT procedures, prompt for sign or symbol response
- ❖ External evidence
 - ❖ Moderately-strong based on single subject designed study and meta-analysis

AAC

- ❖ Baumann Leech, E.R., & Cress, C.J. (2011). Indirect facilitation of speech in a late talking child by prompted production of picture symbols or signs. *AAC: Augmentative and Alternative Communication*, 27(1), 40-52.
- ❖ Dunst, C.J., Meter, D., & Hamby, D. (2011). Influences of sign and oral language interventions on the speech and oral language production of young children with disabilities. *CELLreviews*, 4(4), 1-20.

State Criteria for Part C Eligibility

	Minnesota	Kansas
Criteria for Eligibility for Services	<ol style="list-style-type: none"> 1. Have a disability; or 2. Have a developmental delay; or 3. Have a diagnosed physical or mental condition that has a high probability of resulting in developmental delay. 	<ol style="list-style-type: none"> 1. Have a developmental delay; 2. Have a known condition leading to a developmental delay; or 3. Have an established risk (physical or mental) for developmental delay.
Criteria for Developmental Delay	<p>A score of 1.5 SDs or more below the mean, as measured by the appropriate diagnostic measures and procedures, in one or more of the following areas:</p> <ol style="list-style-type: none"> a) cognitive development; b) physical development, including vision and hearing; c) communication development; d) social or emotional development; and e) adaptive development. 	<ol style="list-style-type: none"> 1. There is a discrepancy of 25% or more between chronological age, after correction for prematurity and developmental age in any one of the following areas: <ol style="list-style-type: none"> a) cognitive development; b) physical development; c) communication development; d) social or emotional development; and e) adaptive development. 2. The child is functioning 1.5 SDs below the mean in any one area listed in 1 above. 3. There are delays of at least 20% or at least 1 SD below the mean in two or more areas listed in 1 above. 4. The clinical judgment of the multidisciplinary team concludes that a developmental delay exists.

Late Talker Cases



Leo

Neva

Caleb



Ilsa

Final Thoughts

- ❖ There are many aspects of intervention that must be considered: dosage, goals, activities.
- ❖ It is important to consider clinician experience and expertise in addition to the external and internal evidence.
- ❖ We have limited data on the long-term outcomes post early intervention.