

Critical Review:

Evaluating the Effectiveness of an Integrated Phonological Awareness Intervention Model for Childhood Apraxia of Speech

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This critical review evaluates the effectiveness of an integrated phonological awareness (IPA) intervention model in simultaneously improving speech production, phonological awareness and literacy skills in children with childhood apraxia of speech (CAS). Overall, the research suggests

Moriarty and Gillon (2006) investigated the effectiveness of an IPA intervention model for three children with CAS aged 7;3, 6;3 and 6;10 (two males, one female). They used a multiple single-subject design with repeated measures (pre- and post-intervention) to determine the effects of intervention. Each participant acted as their own controls. Participants completed three sessions per week for three weeks targeting speech error patterns, phonological awareness, and word decoding. Appropriate statistical analysis including the celeration line and the 2SD band method revealed significant improvements in all trained speech production and phoneme awareness skills, as well as transfer of grapheme to phoneme knowledge to non-word reading tasks. The phoneme awareness skills acquired also led to an improved performance on untrained items. Two of the three children improved performance to near-ceiling levels post-intervention.

It should be noted that one of the participants' non-verbal cognition may have inhibited his ability to progress as quickly as the other two participants.

These results should be interpreted with caution as it is unknown if the children maintained or improved skills post-intervention due to the lack of long term follow-up of the participants' speech production and

this skill than verbal-verbal or visual-visual learning approaches (McNeill et al., 2009b). Furthermore, the Moriarty and Gillon (2006) study targeted sound structures in words through the use of explicit phoneme awareness. As a result, children with CAS were able to develop strong and specific underlying phonological representations of the phonemes, which in turn provided them with the ability to manipulate language (i.e., rhyme, identify phonemes) and develop a foundation for literacy (i.e., reading and spelling).

All three studies demonstrated the efficiency of an IPA model at simultaneously targeting speech production, phonological awareness, letter knowledge, and reading

Pathology, 22 (4), 644-661. DOI: 10.1044/1058-0360(2013/12-0055)

Gillon, G. T., & Moriarty B.C. (2007). Childhood Apraxia of Speech: Children at Risk for Persistent Reading and Spelling Disorder. *Seminars in Speech and Language*, 28(1), 48-57. DOI 10.1055/s-2007-967929. ISSN 0734-0478.

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