Is emergent literacy advanced through speech intervention that incorporates structured early/pre-literacy training for preschool children with isolated phonological disorders?

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This critical review examines the need for incorporating structured early/pre-literacy training into speech intervention for preschool children with isolated phonological disorders. A literature search yielded the following study designs: 5 between groups studies, 2 case-control studies, and 1 study incorporating 18 single subjects. Results are inconsistent, but suggestive for inclusion of early/pre-literacy deficit screening for children with speech sound disorders characterized by consistent, non-developmental speech errors.

The current research linking history of speech sound disorders with later difficulties acquiring literacy is ambiguous. It is widely accepted that children with speech and language difficulties are at increased risk of problems acquiring literacy, but whether this can be attributed to speech or language abilities, or possibly an interaction of the two, is yet to be determined.

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contributors to literacy e.g. phonological awareness, letter knowledge, receptive vocabulary, and nonverbal cognition.

T-tests were used to compare the two groups' performance on various tasks of reading, spelling, phonological awareness, morphological awareness, nonverbal cognition, articulation, and receptive vocabulary. Appropriate post-hoc analyses were conducted where necessary. Children with speech sound disorders scored significantly lower on all measures except letter knowledge and nonverbal cognitive skills; this includes all morphological awareness tasks. However, both groups performed within normal limits on norm-

control group. They also sought to compare the outcomes of the two approaches to initial phonological awareness status and to identify factors that best predicted the amount of speech change made by the children over the course of therapy.

Children with phonological disorders were assigned in a "semi-random fashion" to the two therapy groups in order to achieve even numbers and comparable severity in each group. Pre-therapy all children received an assessment of their speech and phonological awareness abilities (A1); these abilities were reassessed post-therapy for the speech disordered children and 12 weeks from the first assessment for control children (A2). Three months post therapy the speech abilities of children with phonological disorders were retested (A3). At A1, control children attained significantly higher scores on phonological awareness than did children with phonological disorders. ART, MET, and control groups were compared for amount of change in phonological awareness skills between A1 and A2; no significant difference was shown among the three groups. However when the ART and MET groups were collapsed, it was revealed that the children receiving therapy made more change than did controls and this difference was significant. Also, at A2 differences in phonological awareness skills between the control and treatment groups were no longer significant. There were no significant differences in PCC scores between the MET and ART groups at A1. Changes in PCC between A1 and A2 were significant between the ART/control and MET/control groups, but there were no significant differences in PCC change between the MET and ART groups. Difference in changes in individual probe measures between the MET and ART groups was significant, with the ART group making more change. There were no significant differences in measures between A2 and A3 between the ART and MET groups. To compare the outcomes of the two approaches to initial phonological awareness status children were grouped based on type of therapy received and initial phonological awareness status into four subgroups: Good MET, good ART, poor MET, and poor ART. There was no significant difference among the four subgroups for change in individual probe measure. Significant differences were shown between the Good MET/control and Good ART/control groups, with mean change in phonological awareness skill being significantly better for children with initially good skills. To identify factors that best predicted the amount of speech change

Strengths of this study include inclusion criteria, which excluded children with impairments in hearing, oral-motor structure or function, and language comprehension. Weaknesses are that children's speech difficulties were not classified as delayed versus disordered and the authors used a small sample size.

There is great variation in the literature regarding whether or not children with speech sound disorders are at increased risk for difficulties in literacy

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