

Reading and Phonological Awareness in Africa

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This study examined 85 children from baseline and 2 years later. Although more unschooled children had learned to read, their phonological awareness (PA) had not generally improved. Schooling independently predicted PA and literacy.

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Literacy levels in Africa are low, and school instruction outcomes are not promising. Phonological awareness (PA), especially phoneme awareness, is critically associated with literacy. Our previous study found that PA was associated with reading ability, not schooling or age. We retested 85 children from the baseline study 2 years later. We found that more unschooled children had now learned to read; however, PA had generally not improved for these children. Schooling now independently predicted PA and literacy. PA also predicted literacy and vice versa. Explicit phoneme awareness was again poor.

- Africa is the only continent where more than half of parents cannot read sufficiently well to help their

children with their homework.

- Africa has 51% of the world's out-of-school children.
- Phonological awareness (PA) is a multicomponent skill that has been strongly linked to the development of word reading.
- In this study, PA is an abbreviation of phonological awareness; phoneme awareness was not abbreviated.
- A recent, large-scale meta-analysis by Melby-Lervåg, Lyster, and Hulme (2012) found that the concurrent relationship between phoneme awareness and reading was stronger than the relationships between rime awareness/working memory and reading, and independent of relationships between rime awareness/working memory and reading.
- Literacy may to some degree be a prerequisite for gaining phoneme awareness.



The study

In this study, the same cohort of children in Tanzania that were part of a baseline study who were previously either in or out of school were followed up two years later. We aimed to determine whether children's initial literacy skills continued to be the only influence on their PA at follow-up, or whether schooling, children's age, or initial PA skills now influence PA skills independently.

Hypothesis

- *Literacy at baseline (Time 1) will predict PA after 2 years (Time 2).*
- *PA at Time 1 (T1) will predict literacy at Time 2 (T2).*
- *Age and school instruction will not have an independent*

relationship with PA over and above literacy.

The sample

Of the original sample of 101 children in Tanzania, 85 were tested on reading and PA at T1 and T2. Children were 10–13 years old at T2.



Findings

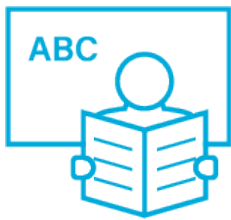
- Some children who could recognise letters and/or words at above-chance levels were currently out of school, including those who had never been in school.
- Children currently in school scored significantly better than those out of school on some (but not all) PA tests.
- Age was not related to PA task scores.
- Even at older age when most children are competent word decoders, very few children appeared to be able to segment phonemes.
- Children who have never been in school seem to make very limited improvements in PA over time.
- T1 PA and schooling independently predicted T2 PA.
- PA and schooling predicted T2 reading.

Summary

- Almost every child was at T2 when they were 10–13 years old, and a functional “decoder” in this regular orthography (Kiswahili), whether or not they had been to school. This confirms our prediction that literacy would have improved at T2 even among children who had never

been to school.

- Children both in and out of school can benefit from self-teaching through phonological recoding.
- It seems that children who are in school are better at PA tasks in general than those who are not in school.
- All children continued to perform poorly specifically on a proxy measure for explicit phoneme awareness.



Implications

- Children can gain some PA skills (including some phoneme manipulation skills) before attending school and/or learning to read.
- Some PA skills will fail to improve among children who are out of school, even though the majority would be accurate word decoders at age 10–13 years.
- Without literacy, PA in general and phoneme awareness in particular cannot be developed beyond basic levels; however, once the initial stages of literacy are gained, PA boosts literacy.
- Schooling is nevertheless increasing children's literacy and PA skills.
- Schooling may improve literacy and PA through additional concentrated practice, access to higher-level reading books, or explicit classroom practices.
- Literacy instruction tends to emphasise syllable (rather than phoneme) awareness.
- Children's home language skills can assist in their school learning.