Early readers’ knowledge of phoneme-to-grapheme correspondences affects individual speech sound processing

Mina Jevtović1,2, Antje Stoehr1, Anastasia Klimovich-Gray1,Alexia Antzaka1, Clara D. Martín1,3
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Reading Acquisition (RA) affects...

Speech Perception

Before RA

After RA

Speech Production

Orthographic (In)consistency

Spoken words with consistent spellings recognized faster than those with inconsistent spellings (Ziegler & Ferrand, 1998)

Speech Sound Representations

Are phoneme representations malleable?

CONSISTENT SOUNDS

INCONSISTENT SOUND

The present study explored whether orthographic knowledge affects already formed representations of speech sounds and hence speech perception & production

Speech Perception Task

Consistent vs Inconsistent sounds as deviants

/in/ /it/ /ik/ /t/ /k/ /u/ /u/ /u/

ns

30 Good 30 Poor

Early readers

Orthographic knowledge affects both the perception and production of individual speech sounds in beginning readers

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