

Reading instruction, CVs-based or phonemes-based method? An experimental study among Arab pre-school children

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This study addresses aspects of reading acquisition with different grain size units among Arabic-speaking pre-school children living in Israel. The Authors' study (2021) which was framed by the phonological-unit-availability notion of the Psychological Grain Size Theory (Ziegler & Goswami, 2005) revealed three accessible phonological units among pre-literate Arab children living in Israel by analyzing children's responses in phonological awareness tasks; phonemes, demi-phonemes tri-phonemic units /ʔεC/ that begin with the prefix /ʔε-/ and end with the target (consonantal) phoneme (e.g., /ʔεs/ for the consonant /s/) and CVs, i.e., core syllables. Based on Authors' previous study (2021), the present study aims to determine whether reading among Arabic-speaking pre-school children is more easily acquired when the teaching method varied according to phonological unit size; phonemes, demi-phonemes or CVs. In addition, the study aimed to investigate the predictors of reading acquisition via the different phonological units in the three training conditions using measures assumed to be related to early reading.

One hundred four children were allocated to three training conditions matching those three phonological units using an unfamiliar script (Malayalam). Children participated in 14 training sessions and were evaluated via retention and generalization of reading and spelling measures.

The CV-based method was found to be more effective than phonemes or demi-phonemes. Further, working-memory, short-term memory and RAN predicted learning via phonemes and demi-phonemes but not via CVs.

Psycholinguistic and pedagogical implications of this experimental study are discussed, in particular, the generalizability of many of the English-based and alphabet-based theories of reading acquisition.

Ziegler, J. C., & Goswami, U. (2005). Reading acquisition, developmental dyslexia, and skilled reading across languages: A psycholinguistic grain size theory. *Psychological Bulletin*, 131, 3–29.