

Phonetic vowel training for Dutch children learning English: the effect of input variability

Gwen Brekelmans¹, Bronwen Evans², & Elizabeth Wonnacott¹

Department of Language & Cognition¹ and Department of Speech, Hearing & Phonetic Sciences² University College London

High variability phonetic training (HVPT) with multiple speaker input (compared to low variability (LV) input with one speaker) has been used successfully to teach adults L2 speech contrasts. However, whether HV is beneficial over LV for children is not as clear, as variability is known to increase processing costs. The little research with children directly comparing HV and LV training input shows no clear evidence for a variability benefit.

To investigate whether children show the expected HV benefit, we ran a two-week phonetic training study in which two groups of Dutch learners of English, aged 7/8 and 11/12, were trained on Standard Southern British English phoneme contrasts that are notoriously difficult for Dutch learners: /u:/-/ʊ/, /e:/-/æ/, /ʌ:/-/ɒ/, with /i:/-/ɪ:/ used as a control contrast. Children received either HV or LV input in training: HV training was spoken by 4 talkers, while LV training was spoken by just one. Effects of variability were investigated using a pre/post-test design in which children's phoneme identification and discrimination abilities as well as their generalisation abilities to novel talkers and items were tested.

Results show only older children improved at post-test, and they did not show any evidence of generalisation to novel untrained items only shown at test. No evidence of a HV benefit was found, and in some tasks an LV benefit was even seen. These results suggest there may be a trade-off between task complexity and a potential variability benefit.