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Training English vowels for French speakers with varying English experience

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It is clear that high-variability phonetic training can improve speech perception for adult second- language learners, but it is uncertain what levels of processing are responsible for this change and whether this interacts with the previous experience of the learners. The present study investigated these issues by giving auditory training to French speakers with varying degrees of English experience. Listeners completed 8 sessions of high-variability identification training with clusters of minimal-pair words (e.g., sleet, slit, slight, slate) and a different speaker in each session. The pre/post tests evaluated changes in vowel perception using open-set identification in quiet and noise, a 3-interval category discrimination task, and a task in which individuals mapped their best exemplars for English vowels in a space that included formant movement and duration. The preliminary results suggest that French speakers improved substantially in their identification performance (about 20 percentage points), without having large changes in their ability to discriminate these categories. The results support a view that training improves the process of applying phonetic category knowledge, without changing the underlying categories themselves.