

# **Examining the role of high-variability phonetic training in second language acquisition**

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Learning a second language (L2) in adulthood is often challenging, especially when the target language contains new sound contrasts which are difficult for learners to perceive. Mandarin Chinese tones constitute one of the most difficult aspects for learners of this language. Traditionally, L2 students are exposed to new sounds through their teacher, meaning they listen to only one voice producing the relevant utterances over a long time. This method has been called low variability phonetic training (LVPT). In recent years, the question whether high variability phonetic training (HVPT) might be more effective in the initial teaching of non-native contrasts has been addressed experimentally. The learners are high school students whose native language is Romanian, and who were raised in a monolingual environment. There are two groups of listeners: those exposed to only one voice (the LVPT group) and those exposed to three voices (the HVPT group). In the LVPT group, the same voice produces 4 repetitions of each stimulus, while in the HVPT group each repetition of a word is produced by a different voice. Listeners are then asked to identify the tone and meaning of randomly presented words presented in the training session, with real-time feedback. On the last day, a final test is administered without feedback, containing both known voices as well as a new voice never heard before. Both before and after training we also administer discrimination tests, to see if listeners can detect tone differences in various word pairs. While the study is currently under way, we expect learning to be more successful in the HVPT group, particularly with respect to generalization to a new voice.