Changes to Perceptual Assimilation Following Training

3pSC14

Julia Kharlamenko[1], Heather M. Kabakoff[1], Erika S. Levy[2], and Susannah V. Levi[1]

[1]Department of Communicative Sciences and Disorders, New York University
[2]Department of Biobehavioral Sciences, Teachers College, Columbia University

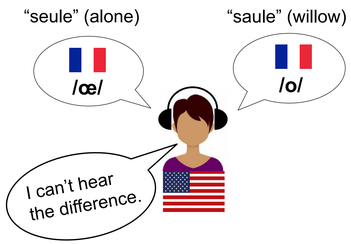
INTRODUCTION

- Learning the speech sounds of a second language is difficult for adults.
  - How difficult it is depends on the relationship between the sounds of a listener's native language and the sounds of the second language.
    (Best et. al, 2001; Flege, 1995; Kuhl, 2000)
  - and on the listener's experience with the second language.
    (Escudero & Boersma, 2003; Levy, 2009a; Levy & Strange, 2008)

Current Study

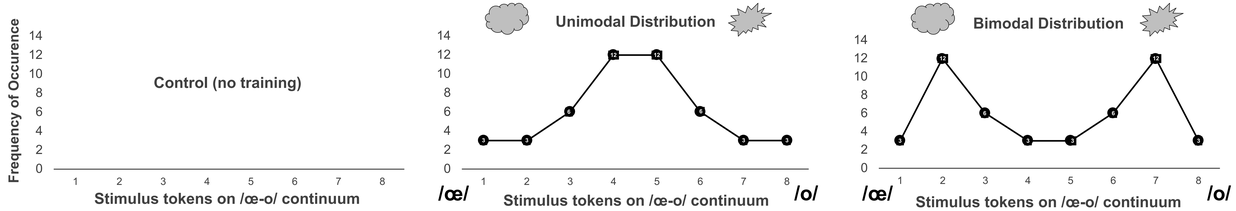
Can perceptual training change how American English listeners hear the French vowels /œ/ and /o/?

- Is one type of training more effective?



METHODS

Training conditions

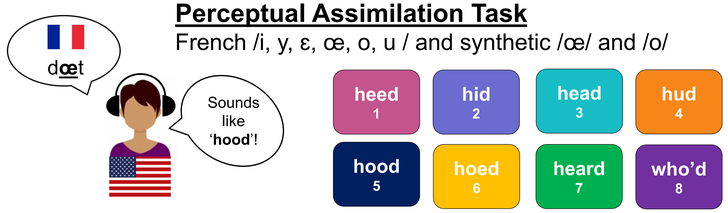


Listeners

- 3x16 speakers of American English
- No experience with French or other language with a front-back rounding contrast

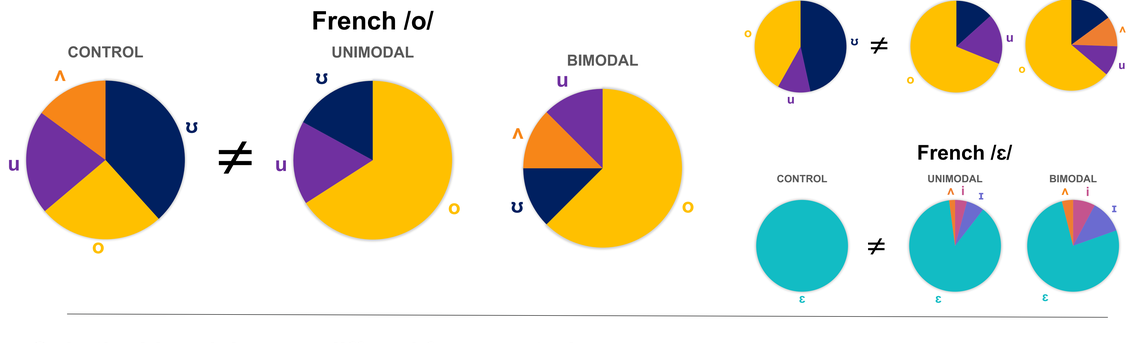
Perceptual Assimilation Task

French /i, y, ɛ, œ, o, u / and synthetic /œ/ and /o/

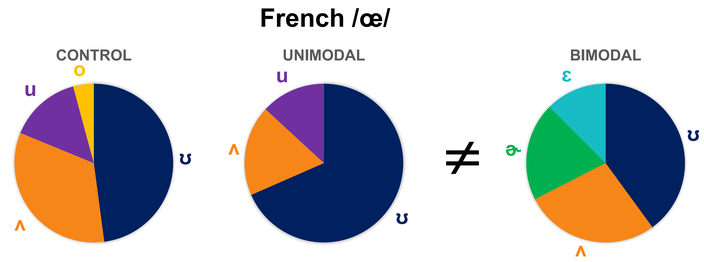


RESULTS

Both trained groups differed from controls



Only the bimodal group differed from controls



TAKE-HOME POINTS

1. Perceptual training changes the way listeners hear sounds in a second language.
   - Both trained groups differed from the control group for /o/, synthetic /o/, and /ɛ/.
2. Bimodal training (hearing sounds that are acoustically different) facilitated greater perceptual change than unimodal training.
   - Only the bimodal group differed from the control group for /œ/.

Correspondence: jk5096@nyu.edu

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