

Effects of Sociophonetic Variability on L1 Spoken Word Recognition

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Abstract: Acoustic variability refers to variations in speech that do not alter linguistic content. Previous studies have demonstrated that acoustic variability decreases first language (L1) spoken word recognition when varying talker, speaking style, or speaking rate but not amplitude or fundamental frequency. This ongoing study examines the effects of region-based sociophonetic variability. In Experiment 1, German speakers will attempt to recognize German nouns while listening to the words with low sociophonetic variability (six speakers of one regional variety, one repetition per speaker) and high sociophonetic variability (six speakers of each of six different regional varieties, one repetition per speaker). Participants will complete word recognition posttests. Experiment 2 will replicate Experiment 1 while counterbalancing the lexical difficulty of the word groups and learning conditions. Based on previous acoustic variability studies conducted in the L1, results of both experiments are expected to reveal decreased recognition for high variability over low sociophonetic variability, which would suggest that regionally varied exemplars of words lead to increased costs to speech processing. This would indicate that different sources of spoken variability that affect phonetically relevant properties of the speech signal, therefore, degrade spoken word recognition. The results of this study will have important implications for determining the nature and development of lexical representations.