The effect of regional dialect on the psychometric reliability and validity of two sets of Mandarin speech audiometry materials

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Previous research has shown conflicting evidence on the effect of testing an individual’s hearing acuity with speech perception materials created in a mutually intelligible, yet non-regional dialect. Thus, the aim of this study is to examine the validity and reliability of using previously developed psychometrically equivalent speech audiometry materials in Mainland Mandarin and Taiwan Mandarin to evaluate the speech perception abilities (word recognition and speech reception threshold) of regional and non-regional listeners of the presented dialects. In addition, this study will investigate whether a native speaker of one Mandarin dialect is able to accurately administer and score the results from listeners of a different regional dialect. Some aspects of the listeners’ performance on materials from a non-regional Mandarin dialect were found to be significantly different statistically. However, it is unclear if such differences are large enough to make a difference in the clinical testing of speech perception. In terms of scoring accuracy, a high percentage of agreement was found between the two interpreters from different dialectal backgrounds. [Work supported by research funding from Brigham Young University School of Education]