Data quality and Nonsampling Error on the American Community Survey Across Individuals Living in Linguistically Isolated and Non-linguistically Isolated Households: A Latent Variable Model Assessment

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Abstract

To address internal validity, one aspect of data quality among many, confirmatory factor analyses for ordered-categorical measures (CFA-OCM) explored measurement invariance across linguistic isolation (LI) status in the American Community Survey. Analyses examined whether the full set of measurement parameters for the six items measuring disability demonstrated differential item functioning, a form of nonsampling error. Given the set of adopted statistical criteria, results generally demonstrated measurement equivalence. Findings support uniformity in the internal validity of ACS data collected across individuals living in LI households for these items, and dispute concerns that LI substantially affects the ability of individuals living in LI households to answer these items on the ACS in a meaningful way as compared to individuals living in non-LI households. When making comparisons regarding disability, investigators using ACS data can be confident that LI status does not impact the validity of comparisons and can place greater faith in the quality of their comparisons.