A comparison of Hispanic infant populations on vocabulary size

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Research indicates that many infants hear both English and Spanish in their home, with census estimates indicating that 73% of Hispanics 5 years or older routinely hear Spanish at home. Most bilingual research has focused on language production, but it is crucial to understand if comprehension follows a similar pattern of development for English-Spanish bilinguals. For infant language comprehension, the Communicative Development Inventories (CDI) is widely used in multiple languages. In this study, Spanish and English CDI data were collected from 16-month-old bilingual Hispanic Miami infants (N=21), and were compared to archival Spanish CDI data of 16-month-old monolingual Mexican infants (N=60). The aim of this study was to compare the Miami sample on the "gold standard" measure of infant language development. Specifically, our objectives were: 1) to identify differences in vocabulary size between the samples when using Spanish-only vocabulary versus total English-Spanish vocabulary for the Miami sample, and 2) to assess the relation between language exposure and vocabulary in our Miami sample. Results indicate that the Miami bilingual sample’s Spanish vocabulary (M=138.09, SE=17.31) was not significantly different in size from the Mexican sample’s Spanish vocabulary (M=185.05, SE=12.67), although significance was trending (t(79)=-1.975, p=0.052, d=.526). When expanding the Miami sample to include infants with <10% English exposure (N=26), a significant difference was found in Spanish vocabulary size between the Miami (M=134.54, SE=15.10) and Mexican samples (M=185.05, SE=12.67; t(84)=-2.329, p=0.022, d=0.572). When comparing the Miami bilingual sample’s composite vocabulary (M=225.44, SE=27.33) to the Mexican monolingual sample’s Spanish vocabulary (M=185.05, SE=12.67), there was no significant difference in vocabulary size between the samples (t(74)=1.428, p=0.158, d=0.389). Within the Miami bilingual sample, relative vocabulary size and dominant language exposure were significantly positively related (r=0.621, p=0.01). These data support previous findings in bilingual samples but also highlight potential issues with bilingual cut-off standards.