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.