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Authors

Bunce, John
Soderstrom, Melanie
Al Aziz, Md Momin
et al.

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Who are you talking to like that? Exploring adults' ability to discriminate child- and adult-directed speech across languages

John Bunce

University of Manitoba , Winnipeg, Manitoba, Canada

Melanie Soderstrom

University of Manitoba, Winnipeg, Manitoba, Canada

Md Momin Al Aziz

University of Manitoba, Winnipeg, Manitoba, Canada

Marisa Casillas

Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands

Abstract

Child-directed speech (CDS) shows similar characteristics across many languages, but is known to vary across cultural and demographic groups (Lieven, 1994). Is CDS consistently discriminable from adult-directed speech (ADS) despite these differences? Perhaps: adults listening to scripted female CDS can discriminate ADS-vs-CDS in a language they don't speak (Bryant et al., 2012). We build on this finding by asking North American English speakers to classify utterances from the natural language input of 10 Tzeltal Mayan children as ADS or CDS ($n = 1836$ utterances). Binomial mixed-effects regressions of accuracy show that listeners are more accurate on utterances from females ($m_{\text{Female}} = .81$, $m_{\text{Male}} = .67$) and adults ($m_{\text{Adult}} = .82$, $m_{\text{Child}} = .72$), with a larger gender effect for child speakers (m : Girl-Boy = 0.31, Woman-Man = 0.09). This suggests that (a) ADS-CDS discrimination of natural speech in an unrelated, non-familiar language is reliable ($m_{\text{All}} = 0.78$) and also (b) modulated by speaker type.