

Adaptation and development of the MacArthur-Bates Communicative Development Inventory (CDI) for South African languages

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Abstract

This presentation reports on a South African team's progress and processes in developing the MacArthur-Bates Communicative Development Inventory (CDI) for each of South Africa's official languages. The CDI is used internationally to measure early language acquisition from 8 to 30 months and has been adapted for over 100 languages. It measures: (1) infants' (8–18 months) gestures and comprehension and production of words, and (2) toddlers' (16–30 months) word production and grammar. Adaptation for six languages (Afrikaans, isiXhosa, Sesotho, Setswana, South African English and Xitsonga) was begun in 2019. We followed a common protocol to adapt and pilot the CDIs in each of these languages. Three linguistic experts per language developed initial lists of gestures, words and grammar for each language, informed by the American English toddler version of the CDI (Fenson et al., 1993) and CDIs developed in Kenya for two languages in the Bantu family, Kigiriama and Kiswahili (Alcock et al., 2015). A minimum of two focus group discussions and/or six interviews with professional child service providers and parents of children in the age range were conducted. We also consulted linguists and speech-language therapists who are mother tongue speakers of the language. Thirty minute samples of naturally occurring speech from six children per language were collected and analysed to inform further adaptation of the CDIs. These preliminary versions of the CDIs and family background questionnaires were each piloted with 80 parents/caregivers (40 rural and 40 urban, where applicable). Statistical analyses of the data informed the exclusion or replacement of items. A second pilot was conducted with 200 parents/caregivers per language in both urban and rural contexts or mid- and low socio-economic status where applicable (n= 1 200). Further statistical analyses were conducted to exclude items that lacked discriminability, were not known by the children in the sample, or were known by most or all of the children. Items were included if they had good difficulty and discriminability in three or more languages and correlated with age. The resulting final long-form CDIs for both infants and toddlers are described and discussed.

Keywords: Communicative Development Inventories; early acquisition; Afrikaans; isiXhosa; Sesotho; Setswana; South African English; Xitsonga

References

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