

Web-CDI: A system for online administration of the MacArthur-Bates Communicative
Development Inventories

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Abstract

One or two sentences providing a **basic introduction** to the field, comprehensible to a scientist in any discipline.

Two to three sentences of **more detailed background**, comprehensible to scientists in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular study.

One sentence summarizing the main result (with the words “**here we show**” or their equivalent).

Two or three sentences explaining what the **main result** reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.

One or two sentences to put the results into a more **general context**.

Two or three sentences to provide a **broader perspective**, readily comprehensible to a scientist in any discipline.

Keywords: keywords

Word count: X

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Current Usage of Web-CDI

We now turn to a discussion of the current usage of Web-CDI. We begin by giving an overview of all Web-CDI usage to date and show that data are consistent with prior data norming efforts (e.g., Fenson et al., 2007). We then focus on our recent data collection efforts that have aimed to increase representation of lower-SES participants. Researchers from 15 universities in the United States have collected over 6,000 administrations of the Web-CDI since it was launched in late 2017. We report here on 4426 of these administrations which satisfy exclusion criteria derived from previous norming efforts of the paper-format MB-CDI.

Participants

Material

Procedure

Data analysis

We used R (Version 4.0.2; ???) and the R-packages *dplyr* (Version 1.0.2; ???), *forcats* (Version 0.5.0; ???), *fs* (Version 1.5.0; ???), *ggmap* (Version 3.0.0; ???), *ggplot2* (Version 3.3.2; ???), *ggthemes* (Version 4.2.0; ???), *here* (Version 0.1; ???), *knitr* (Version 1.30; ???), *lme4* (Version 1.1.23; ???), *lmerTest* (Version 3.1.2; ???), *lubridate* (Version 1.7.9; ???), *magrittr* (Version 1.5; ???), *markdown* (Version 1.1; ???), *Matrix* (Version 1.2.18; ???), *papaja* (Version 0.1.0.9997; ???), *png* (Version 0.1.7; ???), *psych* (Version 2.0.9; ???), *purrr* (Version 0.3.4; ???), *readr* (Version 1.4.0; ???), *stringr* (Version 1.4.0;

54 *???*), *tibble* (Version 3.0.4; ???), *tidyboot* (Version 0.1.1; ???), *tidyr* (Version 1.1.2; ???),
55 and *tidyverse* (Version 1.3.0; ???) for all our analyses.

56 **Results**

57 **Discussion**

References