Peekbank: Exploring children's word recognition through an open, large-scale repository for developmental eye-tracking data

Peekbank team[1], Martin Zettersten[2], & Michael C. Frank[1]

[1] Stanford University

[2] Princeton University

Author Note

Add complete departmental affiliations for each author here. Each new line herein must be indented, like this line.

Enter author note here.

The authors made the following contributions. Peekbank team: Conceptualization, Writing - Original Draft Preparation, Writing - Review & Editing.

Correspondence concerning this article should be addressed to Peekbank team, Postal address. E-mail: my@email.com

Abstract

The ability to rapidly recognize words and link them to referents in context is central to children's early language development. This ability, often called word recognition in the developmental literature, is typically studied in the looking-while-listening paradigm, which measures infants' fixation on a target object (vs. a distractor) after hearing a target label. We present a large-scale, open database of infant and toddler eye-tracking data from looking-while-listening tasks. The goal of this effort is to address theoretical and methodological challenges in measuring vocabulary development. [tools; processing; analysis/ usage examples]

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Across their first years of life, children learn words in their native tongues at a rapid pace (Frank, Braginsky, Yurovsky, & Marchman, 2021). A key part of the word learning process is children's ability to rapidly process words and link them to relevant meanings – often referred to as word recognition. Developing word recognition skills builds a foundation for children's language development and is predictive of later linguistic and general cognitive outcomes (Bleses, Makransky, Dale, Højen, & Ari, 2016; Marchman et al., 2018).

Methods

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

Participants

Material

Procedure

Data analysis

We used R (Version 4.0.3; R Core Team, 2020) and the R-package *papaja* (Version 0.1.0.9997; Aust & Barth, 2020) for all our analyses.

42 ## Results

43 ## Discussion

References

Aust, F., & Barth, M. (2020). *papaja: Create APA manuscripts with R Markdown*. Retrieved from https://github.com/crsh/papaja

R Core Team. (2020). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from https://www.R-project.org/