Prior Reading Experience Explains Individual Differences in Nonword Reading

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1. Background
Nonword reading in English is variable.

Previous studies focused on differences across nonwords [1, 2, 3].

Our study focuses on differences across subjects.

2. General Approach
Differences in nonword reading across subjects reflect differences in reading experience.

Print-to-sound statistics from corpora were compared to those of individual readers.

3. Are Better Readers Closer to Large Corpora?
HYPOTHESIS
Large corpus
Good readers
Large corpus
Poor readers

METHODS
Subjects

We investigated the relationship between the vector of distances from the corpus and subjects’ spelling and vocabulary scores.

RESULTS
The further participants were from the corpus in terms of the print-to-sound statistics that they utilise, the lower their spelling and vocabulary scores were.

4. Variability across Humans and Corpora
HYPOTHESIS

METHODS
Calculated standard deviation (SD) for each GPC across corpora

RESULTS
The more variable the statistics were across corpora, the more variable they were across humans.

5. Conclusions
Varying reading experience can be modelled by diminishing a large corpus of written English. Good readers’ print-to-sound statistics resemble a large corpus, whereas poor readers’ statistics are further away from large corpora. Print-to-sound statistics vary less across individuals if they are less dependent on reading experience (i.e. changes in corpus size).

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