UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Orthographic positional biases in pre- and early readers

Permalink

https://escholarship.org/uc/item/193175hq

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 47(0)

Authors

Isbilen, Erin
Liebmann, Allie
Rueckl, Jay
et al.

Publication Date

2025

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Orthographic positional biases in pre- and early readers

Erin Isbilen
Yale University, New Haven, Connecticut, United States

Allie Liebmann
Albert Einstein College of Medicine, New York, New York, United States

Jay Rueckl
University of Connecticut, Storrs, Connecticut, United States

Kenneth Pugh
Yale University, New Haven, Connecticut, United States

Richard N. Aslin
Yale University, New Haven, Connecticut, United States

Abstract

English-speaking adults demonstrate a strong bias toward processing the beginning of a word when learning to read novel words. This study explored when in literacy development this onset bias emerges. English-speaking pre- and early-readers (4-6-year-olds) were tasked with matching known spoken words (boat) to text presented with three competitors: a nonword that shared the target's onset (baot), an English word that shared its offset (goat), and a nonword that shared an onset with the real-word foil (gaot). We then analyzed participants' accuracy, and false alarm rates to the different competitors. Both groups were above chance in matching known spoken words to their written counterparts. Like adults, children in both groups false alarmed to onset foils significantly more than any other foil. Onset biases were stronger in early-readers than pre-readers, and in children with better word matching skills. The onset bias emerges early in reading development, as children start mapping text-to-speech.

In D. Barner, N.R. Bramley, A. Ruggeri and C.M. Walker (Eds.), *Proceedings of the 47th Annual Conference of the Cognitive Science Society* ©2025 the author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).