# Long-term benefits of boosting vocabulary through reading and play

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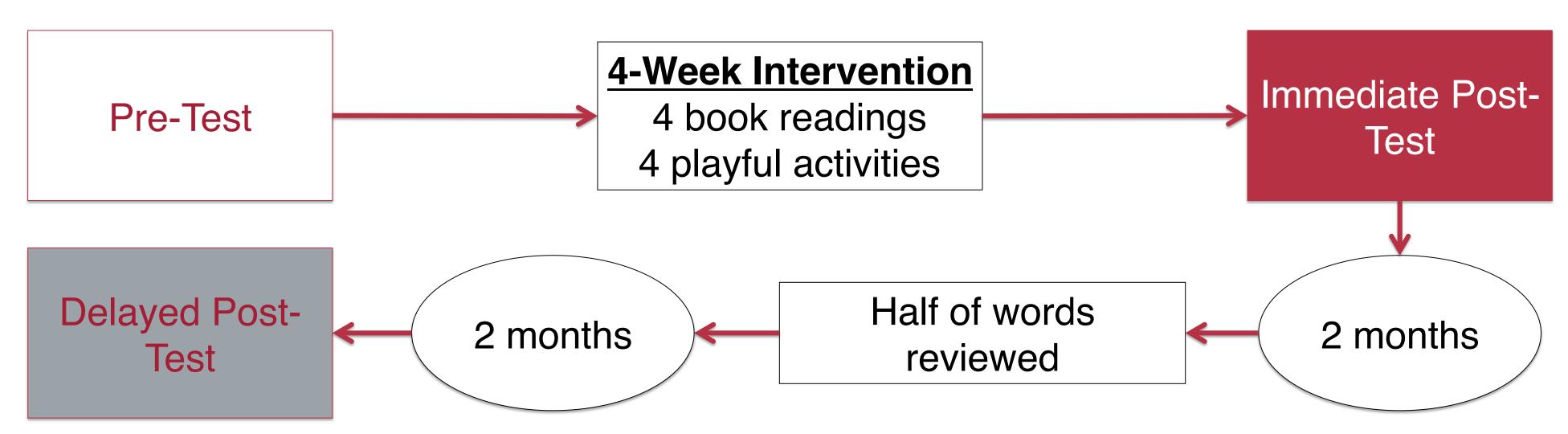
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# Background

- Early language and vocabulary is critical for later reading success (Dickinson, Golinkoff, & Hirsh-Pasek, 2010).
- Low-income children in particular tend to lag behind in terms of vocabulary learning (Hart & Risley, 1995).
- Book reading and play are effective ways to teach in preschool; they are engaging, and motivating for children (Hadley et al., 2016; NELP, 2008; Weisberg et al., 2013).
- Objective: Test a reading and play curriculum for teaching vocabulary in low-income preschools.
   Assess retention of learned words after a delay.

## Method

- Location: Head Start preschool in Philadelphia, Public preschools for low-income families in Nashville
- N = 135 children (58 in Philadelphia, 77 in Nashville) in 10 classrooms
- Mean age at start of year = 52.3 months; Range = 37.4 60.5 months
- Teachers trained in interactive book-reading techniques and playful activities
- Taught 20 difficult target words; Each word taught in four sessions
- Children tested on vocabulary before and after intervention and after 4 month delay
- Half of words reviewed between immediate and delayed post-test by repeating playful activity twice

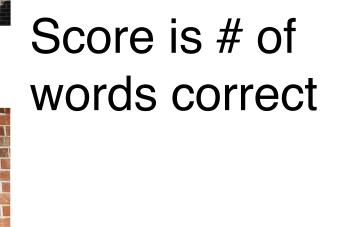


#### **Receptive Vocabulary**









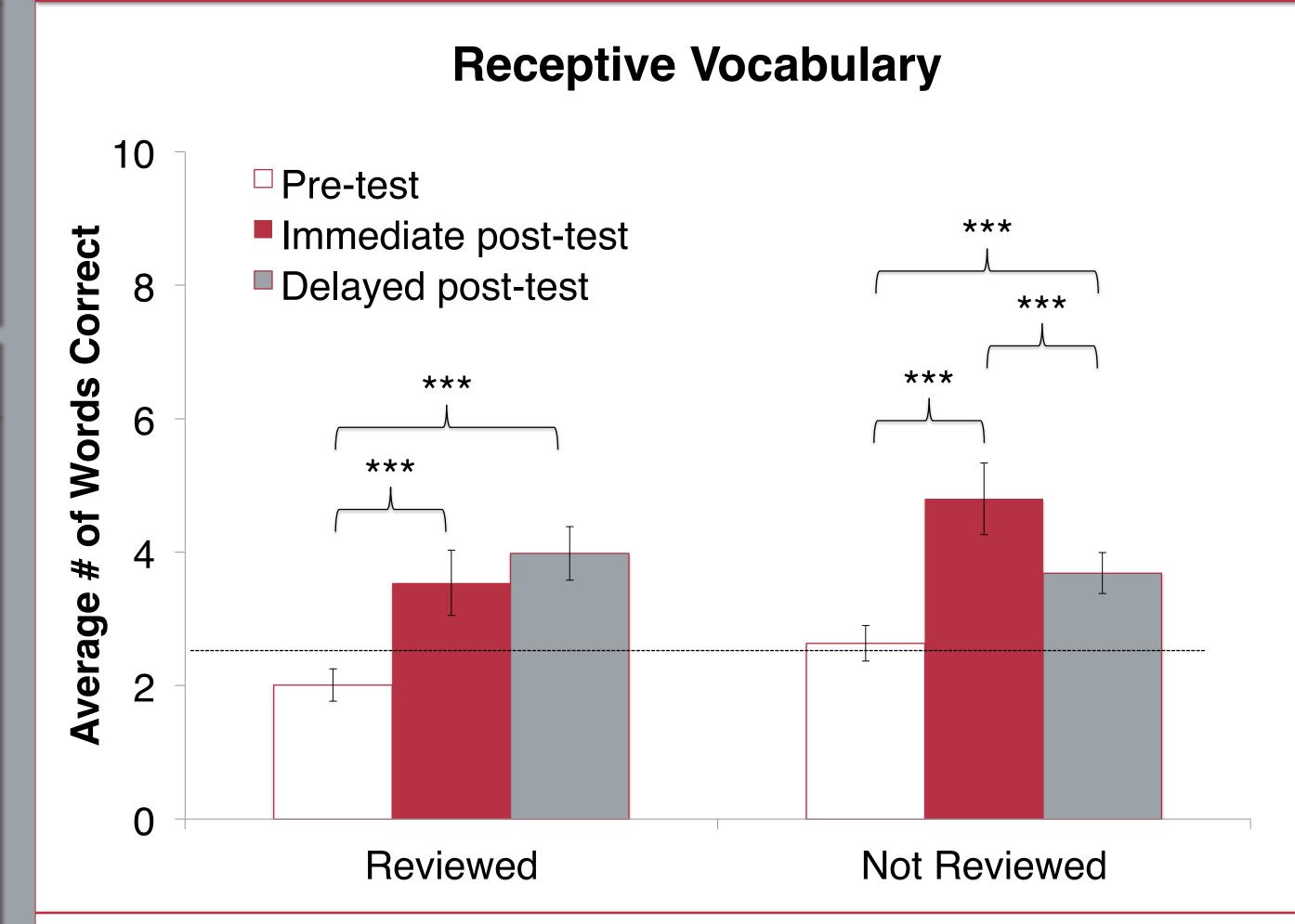
# **Expressive Vocabulary**

"What does <u>awning</u> mean?"
"What is a <u>burrow</u>?"

Responses coded for information units such as describing a feature, giving a synonym, using in context

Score is total # of information units generated

# Results

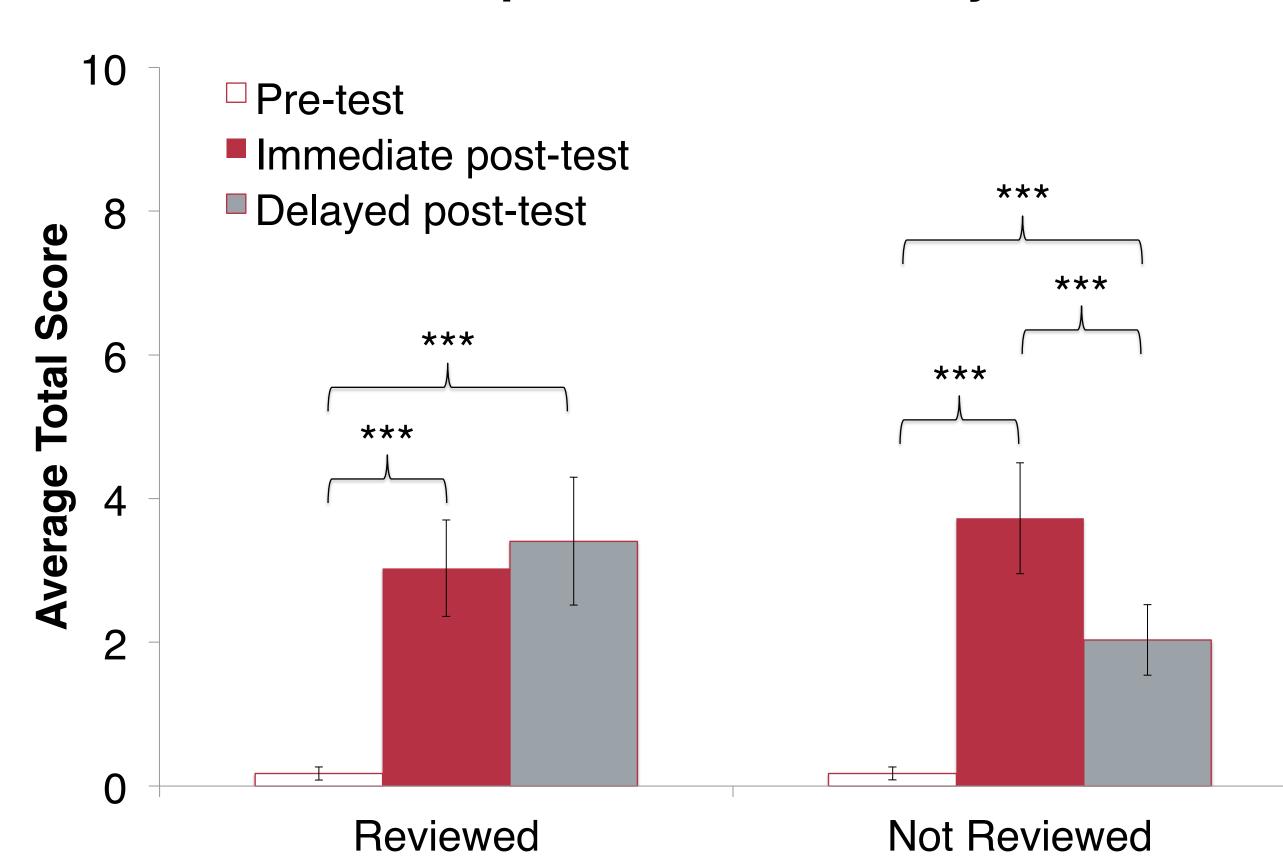


- Chance

\*\*\* paired t-test; p < .001

In a regression, the Time x Review interaction was significant. Scores for non-reviewed words dropped significantly more at delay than scores for reviewed words, p < .001.

### **Expressive Vocabulary**



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# Conclusions

- From this brief intervention (~1 hour per week for four weeks) children showed significant learning of new words.
- Much of this knowledge was retained 4 months later, particularly when a brief interim review was given.
- Book reading and guided play can be effective curriculum tools for encouraging vocabulary growth in low-income preschoolers.

#### References

Dickinson, D. K., Golinkoff, R. M., & Hirsh-Pasek, K. (2010). Speaking out for language: Why language is central to reading development. *Educational Researcher*, 39(4), 305–310. Hadley, E. B., Dickinson, D. K., Hirsh-Pasek, K., Golinkoff, R. M., & Nesbitt, K. T. (2016). Examining the acquisition of vocabulary knowledge depth among preschool students. *Reading Research Quarterly*, 51(2), 181–198.

Hart, B., & Risley, T. R. (1995). Meaningful differences in the everyday experience of young American children. Meaningful differences in the everyday experience of young American children. Baltimore, MD, US: Paul H Brookes Publishing.

National Early Literacy Panel (2008). *Developing early literacy: Report of the National Early Literacy Panel*. Washington, DC: National Institute for Literacy. Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013). Guided play: Where curricular goals meet a playful pedagogy. *Mind, Brain, and Education*, 7(2), 104–112.

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