

Contents lists available at ScienceDirect

## **Cognitive Development**



# Shovels and swords: How realistic and fantastical themes affect children's word learning



Deena Skolnick Weisberg<sup>a,\*</sup>, Hande Ilgaz<sup>b</sup>, Kathy Hirsh-Pasek<sup>c</sup>, Roberta Golinkoff<sup>d</sup>, Ageliki Nicolopoulou<sup>e</sup>, David K. Dickinson<sup>f</sup>

- <sup>a</sup> University of Pennsylvania, United States
- b Bilkent University, Turkey
- <sup>c</sup> Temple University, United States
- <sup>d</sup> University of Delaware, United States
- <sup>e</sup> Lehigh University, United States
- <sup>f</sup> Vanderbilt University, United States

#### ARTICLE INFO

#### Keywords: Word learning Fantasy Bookreading Guided play Low-income preschools

#### ABSTRACT

Research has shown that storybooks and play sessions help preschool children learn vocabulary, thereby benefiting their language and school readiness skills. But the kind of content that leads to optimal vocabulary learning – realistic or fantastical – remains largely unexplored. We investigate this issue as part of a large-scale study of vocabulary learning in low-income classrooms. Preschoolers (*N* = 154) learned 20 new words over the course of a two-week intervention. These words were taught using either realistic (e.g., farms) or fantastical (e.g., dragons) storybooks and toys. Children learned the new words in both conditions, and their comprehension knowledge did not differ across conditions. However, children who engaged in stories and play with a fantastical theme showed significantly greater gains in their production knowledge. Reasons for and implications of this result are discussed.

© 2014 Elsevier Inc. All rights reserved.

E-mail address: deena.weisberg@psych.upenn.edu (D.S. Weisberg).

<sup>\*</sup> Corresponding author at: Department of Psychology, University of Pennsylvania, 3720 Walnut Street, Solomon Labs, Philadelphia, PA 19104, United States. Tel.: +1 215 898 5228.

What is the best way to encourage learning in preschool-aged children? Does children's learning vary depending on content – whether it contains *realistic* themes of cooks and firefighters or *fantastical* themes of monsters and fairies? We investigate this question by examining how realistic and fantastical themes affect children's learning of new vocabulary words. To anticipate, our results suggest that stories with fantastical themes, which include entities or events that cannot occur in reality, can boost children's vocabulary learning more effectively than stories with realistic themes.

We have chosen to focus on word learning because children's early language abilities can have profound effects on their later achievement. Children's linguistic competence in preschool is highly related to later language ability (Dickinson, Golinkoff & Hirsh-Pasek, 2010; NICHD, 2005; Sénéchal, 2006; Storch & Whitehurst, 2002), which in turn predicts school readiness skills, reading comprehension, and overall academic achievement (Dickinson & McCabe, 2001; Gershoff, 2003). Given these connections, it is clear that fostering children's language skills and vocabulary in preschool is important to later academic success.

Such attention to language is even more important for children from lower-income backgrounds. These children enter kindergarten knowing many fewer words than higher-income children (Lee & Burkham, 2002), an achievement gap that does not close over the course of the school years and that may indeed widen (Duncan & Magnuson, 2011; Farkas & Beron, 2004; Hoff, 2003, 2006).

Interventions addressing these children's language abilities have been the subject of much research focusing on which types of intervention are most effective. For example, children learn words better when they are presented in context, rather than in isolation, which deepens children's understanding of the meanings of the new words (Christie & Roskos, 2006; Harris, Golinkoff, & Hirsh-Pasek, 2011; Miller & Gildea, 1987). Stories can provide such a context: Children who hear new words in the course of a story are likely to learn those words (de Jong & Bus, 2002; Elley, 1989; Elley & Mangubhai, 1983; Ganea, Pickard, & DeLoache, 2008). Providing the new words' definitions during the reading of the story is especially helpful to learning (Biemiller, 2006; Biemiller & Boote, 2006; Brabham & Lynch Brown, 2002; Elley, 1989; Penno, Wilkinson, & Moore, 2002). Play situations may also offer a supportive context for word learning (Glenberg, Gutierrez, Levin, Japuntich, & Kaschak, 2004; Han, Moore, Vukelich, & Buell, 2010; Roskos & Christie, 2013). A particularly effective type of play is *guided play*, in which attentive adults structure the play environment and scaffold children's learning (see Lillard et al., 2013; Weisberg, Zosh, Hirsh-Pasek, & Golinkoff, 2013, for reviews). These studies suggest that children can learn new words through book-reading and play activities, and they may learn particularly well if these activities are interactive and personally meaningful.

Although many programs focus on the form of intervention, few have examined the content of intervention activities, specifically whether this content is realistic or fantastical. This is an important issue to address because the content of a story can affect children's engagement and hence their learning. We directly address this question by systematically varying the context in which the new words are presented.

A realistic theme might teach better because it situates new words in a familiar context, allowing children to draw on their own knowledge (Catrambone & Holyoak, 1989; Ganea et al., 2008; Ganea, Allen, Butler, Carey, & DeLoache, 2009; Spencer & Weisberg, 1986). However, some evidence suggests that fantastical or imaginative contexts can benefit preschoolers' thinking abilities. For example, these contexts have been shown to boost preschoolers' abilities to reason counterfactually (Buchsbaum, Bridgers, Weisberg & Gopnik, 2012; Dias & Harris, 1988, 1990; Scott, Baron-Cohen, & Leslie, 1999), to understand improbable events (Weisberg & Sobel, 2012), and to conceptualize pretend actions (Lillard & Sobel, 1999; Sobel, 2006). These findings imply that context can make a difference to children's reasoning skills and that the inclusion of fantastical elements in a word-learning context could be an effective teaching strategy for vocabulary.

We investigate this issue as part of a large-scale study on children's word learning, conducted in low-income preschool classrooms (see Newman, Dickinson, Golinkoff, & Hirsh-Pasek, submitted for publication; Hadley, Dickinson, Hirsh-Pasek, & Golinkoff, submitted for publication, for descriptions of other aspects of the study; results of the full intervention will be published separately). In this study, groups of three children were presented with 20 new vocabulary words in the context of a bookreading activity. The meanings of the new words were further reinforced in a 10-minute play activity following the bookreading. The full study involved three different play conditions to determine how teachers

### Download English Version:

# https://daneshyari.com/en/article/916438

Download Persian Version:

https://daneshyari.com/article/916438

<u>Daneshyari.com</u>