



The efficacy of a school-based book-reading intervention on vocabulary development of young Uyghur children: A randomized controlled trial

Si Chen^{a,*}, Joshua F. Lawrence^b, Jing Zhou^c, Lanbin Min^d, Catherine E. Snow^a

^a Harvard Graduate School of Education, 14 Appian Way, Cambridge MA, 02478, USA

^b University of California, 3200 Education Building, Irvine, CA, 92697, USA

^c East China Normal University, 3663 North Zhongshan Rd, Shanghai, 200062, China

^d Xinjiang Normal University, 102 Xinyi Rd, Shayibake, Urumqi, Xinjiang, 830054, China

ARTICLE INFO

Article history:

Received 20 April 2016

Received in revised form 13 October 2017

Accepted 5 December 2017

Keywords:

Book reading

Randomized controlled trial

Uyghur-Chinese

Language minority children

Vocabulary intervention

ABSTRACT

In China, a particular educational challenge is designing programs for millions of ethnic minority children who also speak a language other than Mandarin Chinese at home. Since most ethnic minority children living in China come from low-socioeconomic status (SES) families, learning Mandarin as a second language is a crucial milestone for them. However, little research has been conducted to explore how to support the bilingual development of young minority children in China. This study evaluated the efficacy of a randomized controlled book-reading intervention held in Xinjiang Province, a unique Uyghur-Mandarin Chinese bilingual region with the lowest GDP of any Chinese province. The school-based book-reading intervention (hereafter, the Xinjiang Project, or the XJP) included a special focus on Chinese-Uyghur bilingual picture books, curriculum of vocabulary instruction, and teacher training. We recruited 256 Uyghur 4–5-year-old children (96 four-year-olds and 160 five-year-olds) from 31 classes in 12 kindergartens from two cities (Urumqi and Turpan) and randomly assigned 16 classes (134 children) to the experiment group and the other 15 classes to the control group, blocked by city, age and, a kindergarten ranking indicator. Across the one-year intervention, we collected three waves of Chinese and Uyghur vocabulary data. We used an individual growth modeling framework employing generalized linear mixed models and found that the intervention led to a more rapid development of Chinese receptive vocabulary (effect size = 0.68) and Uyghur expressive vocabulary (effect size = 0.38). This study shows that well-designed book-reading programs can benefit language minority children by supporting the development of both home and school languages simultaneously. The implications for bilingual education policy-making in China are discussed.

© 2018 Elsevier Inc. All rights reserved.

China has a great diversity of ethnic groups that speak languages other than Chinese. Millions of young children who speak a minority language acquire Mandarin Chinese as their second language only when they start school. Most minority groups in China reside in poverty-stricken rural areas, and many come from low-SES families. Accordingly, learning Chinese as a second language is a crucial milestone on their path to academic success. However, little empirical research has been conducted to explore how to support the bilingual development of young minority children in China. Xinjiang Uyghur Autonomous Region (hereafter, Xinjiang) is a unique Mandarin Chinese-Uyghur bilingual area, with a very large ethnic

minority population; it is also one of the poorest provinces in China. For ethnic minorities such as the Uyghur, knowing Mandarin Chinese is not only an advantage when it comes to getting an education but also a strength in the job market. Economic disadvantage and a lack of second language education resources, however, still impede the language learning of minority children. Traditionally, Uyghur-speaking children had little access to early childhood programs or attended preschool and kindergarten classes conducted entirely in Uyghur, where they had little chance to learn Mandarin. In response to the shortcomings of this educational approach, China's policies over the last fifteen years have significantly expanded access to public kindergarten and preschool, such that 75 percent of all students in Xinjiang are now receiving an educational program designed to be bilingual (Xinhua News Agency, 2015). However, studies of the bilingual education provided in the kindergarten

* Corresponding author.

E-mail address: sic773@mail.harvard.edu (S. Chen).

classrooms of Xinjiang have raised concerns about teaching quality and educational outcomes (Sun, 2010; Zhou et al., 2014). Moreover, most of the studies of Xinjiang early bilingual education do not enter the classroom, focusing instead on discussing the outlines and contents of the education policies. Evidence from experimental research is needed to understand how to improve the quality of early bilingual education in Xinjiang and aid in the development of minority children's Mandarin language skills.

Considerable evidence suggests that a class-based intervention that provides opportunities for young children to read and discuss picture books can advance children's language ability (see review by Wasik, Hinderman, & Snell, 2016). Well-designed picture-book-based interventions in kindergartens help English monolingual and English-Spanish bilingual children improve vocabulary size and listening comprehension (August & Shanahan, 2006). However, whether a book-reading intervention will also improve the vocabulary acquisition of children in a Mandarin Chinese-Uyghur bilingual kindergarten—in either language—is still unclear. This study, as the first randomized controlled intervention focusing on young Uyghur children's language development, explores the causal impacts of a classroom-based book-reading intervention on children's receptive and expressive vocabulary development in Uyghur and Mandarin Chinese. Considering the unique language, culture, and bilingual education policy context in Xinjiang, this study contributes to the current literature in two ways. First, it causally links the book-reading intervention and Uyghur children's vocabulary growth, which will be valuable for bilingual education policy-making. Second, it not only analyzes children's vocabulary development in Chinese, which is the academic language of the classroom, but also calculates the influence of the intervention on children's Uyghur language development. The study may thus have implications for the design of educational programs in other settings where the desired outcome is bilingualism, not just proficiency in the school language.

1. Helping young children improve vocabulary size: evidence from previous studies

1.1. The challenge of vocabulary

Vocabulary knowledge is a critical component of oral language and literacy development, and one of the most significant predictors of children's future academic and life success (De Temple & Snow, 2003; Hart & Risley, 1995; Huttenlocher, Haight, Bryk, Seltzer, & Lyons, 1991; Snow, Burns, & Griffin, 1998). For young children, learning the meaning of words is a foundational skill for reading and writing development (Muter, Hulme, Snowling, & Stevenson, 2004; Sénéchal, Ouellette, & Rodney, 2006). Researchers have found, in studies that control for gender, birth order, ethnicity, and intelligence, that the rate of vocabulary growth from ages four to six predicts later reading and literacy achievement (Lee, 2011; McKeown, 2012). The vocabulary skills of preschool children are essential for school readiness and play a critical role in students' academic success (Cunningham & Stanovich, 1997; Marchman & Fernald, 2008; Morgan, Farkas, Hillemeier, Hammer, & Maczuga, 2015; Walley, 1993).

On average, children from low-SES families arrive at school with less vocabulary knowledge than children from high-SES families (Hoff & Tian, 2005; Rydland, Aukrust, & Lawrence, 2013). Children living in low-SES families experience less maternal speech, exposure to print materials, and language use (including oral language and gestures), as well as fewer enrichment opportunities (Dickinson & Tabors, 2001; Hoff, 2003; Rowe & Goldin-Meadow, 2009; Turkheimer, Haley, Waldron, D'Onofrio, & Gottesman, 2003). Many young low-SES children face challenges when they enter

school with comparatively limited vocabulary knowledge (Hart & Risley, 1995; Snow et al., 1998). Recent research has found that language minority (LM) children also face learning barriers that hamper swift second language (L2) vocabulary learning rates (Pollard-Durodola et al., 2016; Roberts, 2008; Tabors & Snow, 2003). LM children's global L2 language skills may lag behind those of their monolingual peers (August & Shanahan, 2006; Lesaux, Rupp, & Siegel, 2007; Patterson, 2004; Reese, Sparks, & Leyva, 2010; Uccelli & Pérez, 2007).

1.2. Interventions for vocabulary growth

Well-designed interventions are required to help LM children improve vocabulary development at an early age in preparation to overcome the language and academic barriers in their future. A meta-analysis reveals that the effect size of vocabulary interventions in preschool and kindergarten is relatively large; on average, such interventions can help young children score nearly one standard deviation higher than controls on measures of target words (Marulis & Neuman, 2010). Many interventions focused on improving LM kindergarten students' vocabulary that have been proven to be effective have the following features: (1) using picture books to increase children's exposure to words (Loftus, Coyne, McCoach, Zipoli, & Pullen, 2010; Silverman & Hines, 2009); (2) preparing teachers to improve the quality of vocabulary instruction (Cheung & Slavin, 2005; Kohnert, Yim, Nett, Kan, & Duran, 2005); and (3) designing new curriculum that encourages children to discuss and use the target words (Ruston & Schwanenflugel, 2010; Silverman, 2007).

1.2.1. Using picture books

Conducting shared reading activities with picture books in the classroom has proven an efficient and reliable method to help young children develop language proficiency. The effect size varies from 0.1 to 1.0 standard deviation (Wasik et al., 2016). Picture books and shared book reading activities in classroom provide topics that promote high-quality dialogues and child-teacher interactions. Solid evidence supports the idea that specific teaching strategies such as dialogic reading based on picture books are effective in improving children's vocabulary and other language skills (Hargrave & Sénéchal, 2000; McKeown & Beck, 2006). Well-designed experiments in monolingual groups show that picture books provide valuable opportunities for young children to learn unfamiliar yet essential vocabulary that they may not encounter in daily life (Mol, Bus, & de Jong, 2009; Weizman & Snow, 2001). Interventions that provide more than twenty books for the classroom, as well as instructions for teachers on how to use the materials (Silverman, Crandell, & Carlis, 2013; Wasik, Bond, & Hindman, 2006), detect a significant increase in children's receptive vocabulary.

1.2.2. Improving the quality of vocabulary instruction

Putting picture books in the classroom is not enough. Researchers emphasize that specific vocabulary instruction strategies are required (Snell, Hindman, & Wasik, 2015). Many studies suggest two essentials that promote children's language development. First, it is crucial for the teacher to lead a discussion around the picture book (Jalongo & Sobolak, 2011). Discussion about the book potentially provides multiple exposures to the target vocabulary. Additionally, asking and answering questions about the concepts and events in the picture book may lead to a better understanding of the meaning of vocabulary. The second important method is to expand the topic of the picture book into different classroom activities to improve the quality of early childhood development programs (Britto, Yoshikawa, & Boller, 2011)—e.g., role play, art corner or emergent writing (Hassinger-Das et al.,

Download English Version:

<https://daneshyari.com/en/article/6840602>

Download Persian Version:

<https://daneshyari.com/article/6840602>

[Daneshyari.com](https://daneshyari.com)