Systematic Translational Review

Parenting Interventions to Improve Pre-literacy Reading Skills for Children Ages 2–5
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Research Question
Are there brief, low-cost, home-based parenting interventions that improve pre-reading skills for children ages 2–5?

Bottom Line
The best available evidence suggests that dialogic reading, a relatively brief, low-cost, home-based intervention, can improve families’ literacy activities and the pre-reading skills of young children.

Background
To support a community-based adaptation of a promising study of spatial language acquisition in preschoolers, a Systematic Translational Review was conducted to identify successful home-based and brief interventions involving language development in 2–5 year olds.

Methods
In January of 2015, the databases Academic Search Premier, ERIC, and PsychINFO were searched using the terms (“literacy” OR “pre-reading” OR “pre-literacy” OR “early reading”) AND (“intervention” OR “program” OR “train*”) AND (“home-based” OR “family-based” OR “parent-based”) AND (“review” OR “meta-analysis”). Articles were included if they appeared in peer-reviewed English-language publications and evaluated programs that trained parents to improve their child’s reading or pre-reading skills. Reference lists of included articles were also scanned for relevance. Further, searches of the above databases were repeated using the names of interventions that met inclusion criteria.

Findings
Multi-database searching resulted in 23 records; 19 unique records remained after duplicates were removed; 14 records were excluded based on the title, abstract, language, or type of record; 5 articles were retrieved for full-text review. Two articles were eliminated because the participant age was older than 2–5 years, and one was excluded because the intervention was more intensive than desired by the practitioner for whom this review was conducted. In addition to the two articles from the database search (Manz et al., 2010; Weitzman et al., 2004), four from reference lists and searches of specific interventions were included in this review. Of the interventions in the included articles, dialogic reading was supported by the highest quality evidence and therefore receives the most discussion in this review.

Dialogic Reading
Dialogic reading is a brief, low-cost intervention designed to get parents to read with rather than to their children (Fielding-Barnsley & Purdie, 2003). It is based on the following three principles: (a) parent use of evocative techniques to encourage the child to talk about book material during reading; (b) informative feedback by incorporating expansions, corrective modeling, and other forms that highlight differences between what the child has said and what he might have said; and (c) an adaptive parent sensitive to the child’s developing abilities (Whitehurst et al., 1988). Arnold et al. (1994) developed a dialogic reading intervention for parents that consists entirely of written instructions and a videotape. The videotape training consists of didactic instruction and modeling in 2 parts; one 20 min. and one 15 min. segment. Following the description of and rationale for each reading technique, several examples of (actual) mothers using the technique with their (actual) children are shown. Typically, intervention studies that have used the dialogic reading video training last 6–8 weeks and consist of pre-/post-test measures of children’s pre-literacy skills, weekly logs of the frequency of book reading, and a pre-/post-video or audio tape of parent reading style.

Mol and colleagues (2008) conducted a meta-analysis of 16 dialogic parent reading interventions that included a total of 626 children. They reported a moderate-sized correlation ($r = .20$) between dialogic reading intervention and a composite measure of linguistic skills. Among 9 studies ($n = 322$) that evaluated expressive language skills, a slightly larger association was found ($r = .29$). Compared to 4–5 year old children ($d = .14$), these benefits were much greater among 2–3 year olds ($d = .50$). Results were significantly less for children of mothers with low levels of education (explaining 1% of the variance in pre-literacy outcomes) than for children of mothers with more education (7%).

Manz et al. (2010) extended the work of Mol and colleagues (2008) by conducting a meta-analysis of empirically-
supported family-based interventions for emergent literacy in children ages 2–6 who are at risk for reading difficulty (low-income, ethnic minority, or non-English speaking). Ten of the 14 experimental or quasi-experimental studies analyzed focused on dialogic reading. In line with what Mol et al. (2008) reported, their results showed a small but significant effect for dialogic reading interventions, with stronger effects for expressive language than for receptive language. Phonological awareness, an outcome not examined by Mol et al., showed larger effects than expressive language. When interventions were analyzed by setting, home-only interventions showed small to moderate effects, while the effects for home-school interventions were negligible.

Other Programs
Reach Out and Read (ROR) is a national effort to change the literacy attitudes and behaviors of low-income parents (Weitzman et al., 2004). The intervention consists of medical professionals distributing books, materials regarding the importance of reading, strategies parents can use while reading to their children, and a “prescription for reading to children at each medical visit from age 6 months to 5 years.” Several randomized and quasi-experimental studies support the efficacy of ROR in changing parents’ attitudes and beliefs regarding literacy as well as improvements in children’s vocabulary scores. However, a recent review of the quality of these studies indicates that the results should be interpreted with caution due to methodological limitations (Yeager et al., 2014).

Bibliography


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For an overview of the review process, please see *Systematic Translation Review Description* at www.bctr.cornell.edu?attachment_id=3965

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