



Reach Out and Read: The Evidence

Research shows that when pediatricians promote early literacy according to the Reach Out and Read model, there is a significant effect on parental behavior, beliefs, and attitudes towards reading aloud, as well as improvements in the language scores of at-risk young children who participate. These effects have been found in ethnically diverse low-income families, in all areas of the country, regardless of parental literacy.

The body of published research supporting the efficacy of the Reach Out and Read model is more extensive than for any other psychosocial intervention in general pediatrics.

The following studies have been published in peer-reviewed medical journals:

STUDY	MAIN FINDINGS
Needman et al. 1991	Parents who had received a book as part of Reach Out and Read were more likely to report reading books with their children, or to say that reading was a favorite activity. The benefits of Reach Out and Read were larger for families receiving Aid to Families with Dependent Children.
High et al. 1998	Parents whose children (under 3 years) had received books and educational materials during well-child visits were more likely than parents in a control group to report that they shared books with their children, and to cite sharing books as a favorite activity or a child's favorite activity.
Golova et al. 1999	Hispanic parents whose children had received bilingual books, educational materials, and literacy-promoting anticipatory guidance were more likely to report reading books with their child at least three days per week (66% vs. 24%), and that reading books was one of their three favorite things to do with their child (43% vs. 13%) than parents in a control group. Parents participating in the Reach Out and Read-model intervention also tended to have more books in the home (for children and adults).
High et al. 2000	Families participating in the Reach Out and Read model were more likely to read to their children (4.3 vs. 3.8 days per week), and their toddlers' receptive and expressive vocabulary scores were higher, even when adjusting for parental education, foreign-born, and language proficiency.
Sanders et al. 2000	Hispanic parents participating in Reach Out and Read were more likely to report reading to their children compared to non-Reach Out and Read parents. When parents read more frequently to their children, they were also more likely to read frequently themselves.
Jones et al. 2000	Parents participating in Reach Out and Read were more likely to rate their child's pediatrician as helpful than those not participating in Reach Out and Read. Pediatricians in the Reach Out and Read group were more likely to rate parents as receptive than those in the non-Reach Out and Read group. Mothers in the Reach Out and Read group were two times more likely to report enjoyment in reading together with their child than those in the non-Reach Out and Read group.
Mendelsohn et al. 2001	High-risk urban families participating in Reach Out and Read read more frequently to their children. Children exposed to Reach Out and Read had higher receptive language scores (mean: 94.5 vs. 84.8) and expressive language scores (mean: 84.3 vs. 81.6). Increased exposure to Reach Out and Read led to larger increases in language scores (receptive and expressive).
Sharif et al. 2002	Children participating in Reach Out and Read had higher receptive vocabulary scores (mean: 81.5 vs. 74.3). They also had higher scores on the Home Literacy Orientation (measured reading to child and number of books in the home) than children not participating in Reach Out and Read.
Silverstein et al. 2002	English and non-English speaking families who participated in the Reach Out and Read model increased their weekly bedtime reading, and more parents reported reading as their own or their child's favorite activity. For non-English speaking families the number of children's books in the home also increased as a result of the Reach Out and Read model.
Theriot et al. 2003	Among children age 33 to 39 months attending a well-child clinic in Louisville, KY, expressive and receptive language scores were significantly associated with both the number of Reach Out and Read-enhanced well-child visits they had attended, and with the number of books purchased for them by their parents. This finding supports a "dose effect" for the Reach Out and Read intervention: the more Reach Out and Read, the higher the score.

STUDY	MAIN FINDINGS
Weitzman et al. 2004	In a study using direct observation of children's homes, parents were more likely to read aloud to their children and enjoy reading together when their families had more encounters with the Reach Out and Read program.
Needlman et al. 2005	In a multicenter study, families exposed to Reach Out and Read were more likely to report reading aloud at bedtime, to read aloud three or more days per week, mention reading aloud as a favorite parenting activity, and own 10 or more children's books.
Byington et al. 2008	This qualitative study examined the thank-you notes sent to staff at a Reach Out and Read clinic by Hispanic families. Families expressed thanks for the books received, as well as the literacy advice given by doctors and nurses. Many families believed that the books and advice promoted the habit of reading, and demonstrated respect the staff held for the families and their children.
King et al. 2009	Successful implementation of the Reach Out and Read Program was related to the culture of the clinic. Staff at clinics that struggled to implement Reach Out and Read found their jobs burdensome and reported lacks in communication. Staff at successful Reach Out and Read sites worked as a team and expressed strong commitments to their communities.

References:

1. Needlman R., Fried L.E., Morley D.S., Taylor S., Zuckerman B. "Clinic-based intervention to promote literacy. A pilot study." *American Journal of Diseases of Children* 1991; 145, p. 881–884.
2. High P., Hopmann M., LaGasse L., Linn H. "Evaluation of a clinic-based program to promote book sharing and bedtime routines among low-income urban families with young children." *Archives of Pediatrics and Adolescent Medicine* 1998; 15, p. 459–465.
3. Golova N., Alario A.J., Vivier P.M., Rodriguez M., High P.C. "Literacy promotion for Hispanic families in a primary care setting: A randomized controlled trial." *Pediatrics* 1998; 103, p. 993–997.
4. High P.C., LaGasse L., Becker S., Ahlgren I., Gardner A. "Literacy promotion in primary care pediatrics: can we make a difference?" *Pediatrics* 2000; 104, p. 927–934.
5. Sanders L., Gershon T.D., Huffman L.C., Mendoza F.S. "Prescribing books for immigrant children." *Archives of Pediatrics and Adolescent Medicine* 2000; 154, p. 771–777.
6. Jones V.F., Franco S.M., Metcalf S.C., Popp R., Staggs S., Thomas A.E. "The value of book distribution in a clinic-based literacy intervention program." *Clinical Pediatrics* 2000; 39, p. 535–541.
7. Mendelsohn A.L., Mogiler L.N., Dreyer B.P., Forman J.A., Weinstein S.C., Broderick M., Cheng K.J., Magloire T., Moore T., Napier C. "The impact of a clinic-based literacy intervention on language development in inner-city preschool children." *Pediatrics* 2001; 107(1), p. 130–134.
8. Sharif I., Rieber S., Ozuah P.O. "Exposure to Reach Out and Read and vocabulary outcomes in inner city preschoolers." *Journal of the National Medical Association* 2002; 94, p. 171–177.
9. Silverstein M., Iverson L., Lozano P. "An English-language clinic-based literacy program is effective for a multilingual population." *Pediatrics* 2002; 109, p. e76.
10. Theriot J.A., Franco S.M., Sisson B.A., Metcalf S.C., Kennedy M.A., Bada H.S. "The impact of early literacy guidance on language skills of 3-year-olds." *Clinical Pediatrics* 2003; 42, p. 165–172.
11. Weitzman C.C., Roy L., Walls T., Tomlin R. "More evidence for Reach Out and Read: A home-based study." *Pediatrics* 2004; 113, p. 1248–1253.
12. Needlman R., Toker K.H., Dreyer B.P., Klass P., Mendelsohn A.L. "Effectiveness of a primary care intervention to support reading aloud: a multicenter evaluation." *Ambulatory Pediatrics* 2005; 5, p. 209–215.
13. Byington C.L., Hobson W.L., Olson L., Torres-Nielsen G., Winter K., Ortiz K.A., Buchi K.F. "The good habit of reading (el buen habito de la lectura): Parental reactions to an enhanced Reach Out and Read program in a clinic for the underserved." *Journal of Health Care for the Poor and Underserved* 2008; 19, p. 363–368.
14. King T.M., Muzaffar S., George M. "The role of clinic culture in implementation of primary care interventions: The case of Reach Out and Read." *Academic Pediatrics* 2009; 9 (1), p. 40–46

For more information, contact the Reach Out and Read National Center

56 Roland Street ■ Suite 100D ■ Boston, MA 02129-1243 ■ T 617-455-0600 ■ F 617-455-0601 ■ E info@reachoutandread.org