



Parent-Child Reading Time and Child Reading Scores: Evidence from New Research and Cornell Cooperative Extension Parent Education Programs

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Children's exposure to book reading is believed to positively impact cognitive development. Yet there is little empirical research identifying whether it is reading time per se, or other factors associated with families who read, such as parental education or children's reading skill, that improves children's achievement. New research by Price and Kalil (2018) finds causal evidence that mother-child shared reading influences children's reading scores, demonstrating that shared book reading improves children's reading skills.

This Research-to-Practice brief discusses these findings in the context of statewide evaluation data from Cornell Cooperative Extension (CCE) Parent Education programs. Pre- and post-survey results show significant increases in the amount of time parents and caregivers who take part in CCE parent education programs spend reading to their child(ren), which, according to the research, may improve children's reading skills.

Background

Parents play a key role in creating an environment that fosters healthy child development, with factors such as family influences and cognitive stimulation—including reading to a child—contributing to positive child outcomes. Indeed,

several studies suggest that shared reading time promotes improvement in children's vocabulary through exposure to language input (Wells, 1985), and provides opportunities for parents to transmit knowledge and scaffold learning through discussion during reading time (Bus, van Ijzendoorn, & Pellegrini, 1995; Mol, Bus, de Jong, & Smeets, 2008; Ninio & Bruner, 1978; Reese & Cox, 1999; Van Kleeck, Stahl, & Bauer, 2003), the use of labeling and corrective feedback in order to bolster children's reading comprehension (Snow & Goldfield, 1983), and affective and emotional support (Shonkoff et al., 2012). However, it is unclear whether other factors that explain the relationship between reading time and positive development, such as parent education level, may also affect outcomes.

The Effect of Mother-Child Reading Time on Children's Reading Skills

Methods:

Price and Kalil examined data from a nationally representative sample of 4,239 children born to female respondents of the 1979 National Longitudinal Survey of Youth (NLSY). Families with two or more children were included in the study, and in families with more than two children, only the two

oldest children were included in the sample. The authors measured reading and math scores of the children using the Peabody Individual Achievement Tests (PIAT) of reading recognition and math for children ages 5-9 and the Peabody Picture Vocabulary Test (PPVT) for children aged 3-6 years. Both the PIAT and PPVT are well-validated and widely used measures of academic achievement. Mother-child reading time was measured using a question from the NLSY that asked how often mothers read to their child(ren), with responses ranging from never to daily.

Results:

The results of this study suggest that frequency of shared reading increases during the infant years, peaks at two years of age, and then decreases as children age. By the time children were 10 years old, no mothers in the sample reported reading to their children daily. Because of this, analysis of the data collected is limited to children ages 0-9.

Results also indicate that first-born children were read to more often than second-born children, and this gap increased with a greater age difference. While the researchers do not offer an explanation for this difference, it may be explained by having more time to read to a first-born child, than to read to a second-born child while having two children to care for. This study also found that first-born children tended to have higher reading scores than second-

born children, suggesting a direct relationship between time spent in shared reading and reading scores. Specifically, findings showed that an extra day of mother-child reading time per month increased children's reading score by about .8 points on the PIAT or PPVT.

CCE Parent Education Programs and Statewide Evaluation Data

CCE parent education provides a number of program options to parents across New York State with the goal of enhancing parent-child relationships,

These programs include: 1) general parenting programs (e.g., communication, discipline, parenting styles) appropriate for all parents; 2) developmental (e.g., toddlerhood to young adults and all developmental stages in between) appropriate for parents with children in these various stages; and 3) content-specific (e.g., programs for divorcing or separating parents, grandparents raising grandchildren, etc.) designed for particular family circumstances.

All CCE parent education programs are evaluated statewide through pre- and post-test surveys given to participants who attend a program or programs and who complete at least six hours of content delivery. The pre/post study design allows for determining if participants' attitudes, behaviors, and knowledge change during the course of the parenting programs. While this design does not allow for concluding that taking part in parent education programs caused a change in attitudes, behaviors and knowledge (such changes can occur for other reasons outside of the program) it

is possible that any significant pre-to-post changes in parenting attitudes, behaviors and knowledge that are observed may have resulted from taking part in the program.

Given the results from Price and Kalil's research showing that changes in time spent reading with children is likely to have positive effects on children's reading scores, we examined findings from a CCE parent education survey question designed to measure changes in reading time: "How often do you read to your child or does your child read for enjoyment?" Statewide results show significant increases in the amount of time that parents and caregivers who participated in CCE parent education programs from 2010-2017 spent reading to their child, or that their child spent reading for enjoyment. Additionally, data from several individual parent education programs suggest an increase in reading time from the beginning to the end of the program including Discipline is Not a Dirty Word (increases shown in 2010-2016 reports), Magic Years (increases shown in 2010, 2011, and 2013 reports)

Active Parenting (increases shown in 2015 report), and Middle Years (increases shown in 2012 report). Although these results do not demonstrate causality, their significance is noteworthy in light of the direct relationship between time spent in shared reading and increased reading scores found in the research.

Conclusions

Price and Kalil's research demonstrates that increased reading time spent with children is causally related to increased reading scores. Evaluation results from several CCE parent education programs show that the amount of time parents and caregivers spent reading with children or encouraging children to read for their own enjoyment increased significantly from pre- to post-survey for parents and caregivers who attended a CCE parent education program. Contextualizing the evaluation results in the research findings, parents and caregivers who attend CCE parent education programs engage in reading behaviors that may have a positive impact on children's reading outcomes.

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