

Helping Parents with Their Young Children's Reading and Math Skills



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The preschool years are a critical time for children to develop a foundation of early reading and mathematics skills (Serpell, Baker, & Sonnenschein, 2005; Sonnenschein, Metzger, & Thompson, 2016) because these learning fundamentals provide the basis for acquiring more advanced skills as children progress through school. Using data from six large-scale studies in the U.S. and Canada, Duncan and colleagues (2007) found children's early (e.g. at the start of kindergarten) academic skills, particularly related to math, were strong predictors of their performance during later elementary school. Serpell and colleagues (2005) found a similar relation for reading skills. School psychologists can play an important role to increase children's exposure to reading and mathematics activities at home.

Research shows that the activities children do at home during their preschool years are positively associated with the development of their academic skills. For example, how often children read different types of books is positively related to the development of their reading abilities (Sénéchal & LeFevre, 2002; Serpell et al., 2005). A similar relation holds for math activities and skills (Blevins-Knabe, 2016). That is, providing children access to stimulating mathematics activities fosters mathematics development. We also know that parents view it as their role to assist their young children with reading and math activities at home (Sonnenschein et al., 2016).

In order for parents to assist their children, however, they need to know what kinds of reading and math activities to provide. In one study, middle-income mothers of preschoolers reported they felt more confident assisting with reading than math (Cannon & Ginsburg, 2008). In fact, many of those mothers reported that they did not know how to assist with math. Some parents ask their children's teachers for guidance (Sonnenschein et al., 2018). School psychologists are also frequently called upon to offer advice to parents of preschool and early elementary school age children about activities to do at home. This begs the question: what information do parents want to help their children develop early reading and math skills?

We recently used an online survey to learn how confident parents of preschoolers felt assisting their children with reading and math. Two hundred thirty-six parents, mainly mothers (94%), of preschool children completed the online survey. Although these parents came from varying locations around the US, most were White (88%) and had at least a bachelor's degree (92%). Such patterns are typical when using online surveys (Galea & Tracy, 2007). Despite the homogeneity of our sample, our findings still provide valuable insights into the types of information parents are interested in.

Most parents thought it was very important for their children to read (86%) and do math activities at home (68%), with ratings for reading being significantly higher than math. The majority of parents also saw it as important to assist their children with reading (77%) and math (70%) at home. These findings are consistent with other research (Sonnenschein et al., 2016). Interestingly, when asked how confident they were in assisting their children in these reading and math activities, only 40% of parents reported they were very confident that they knew what to do to support their child's learning in reading, and only 32% of parents were very confident in their ability to support their child's math learning.

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This pattern of results, parents seeing it as their role to assist their children's learning at home but believing that they need advice on what activities to offer them, creates an important opportunity for school psychologists to offer guidance.

Parents also reported that they would like fun, play-based ways to support their child's reading and math skills. This is consistent with other research showing that making learning fun for young children and engaging their interest in such learning is positively associated with better academic abilities (Sonnenschein et al., 2016). Drilling children on skills is not (Serpell et al., 2005).

What can parents do to support their preschool children's learning of reading and math skills? And, what should school psychologists tell them? School psychologists have many opportunities (e.g., IEP meetings, assessments, informal conversations, trainings, and more) to share pertinent information. Parents are encouraged to make it a fun part of everyday routines and play-time. To support their child's reading, parents can expose their children to a variety of reading genres (e.g., storybooks, information text), play rhyming games, sing songs, and talk with children about everyday events (Serpell et al., 2005; Snow, Burns, & Griffin, 1998). The car is a great place to point out letters and words in the environment (e.g., the large "M" in McDonalds or the "T" in Target). Not only will this increase children's knowledge of the alphabet but it will increase their print awareness. Children also can draw letters using chalk on the sidewalk or shaving cream in the bathtub. When reading before bed, parents can discuss how the book relates to aspects of the children's life and ask them to predict what happens next.

For mathematics, parents can focus on fun, everyday activities within five key areas: counting and cardinality (e.g. grouping), operations and algebraic thinking, numbers and operations in base 10, measurement and data, and geometry (Sonnenschein, Dowling, & Metzger, n.d.). Going to the grocery store and counting the oranges or playing a game like Candy Land supports the development of counting and cardinality skills. Asking questions like, "We picked two flowers, if you pick one more how many do we have?" is a wonderful way to prompt algebraic thinking. Playing store and trading 10 pennies for a dime or grouping Legos into groups of 10 helps children develop an understanding of numbers and operations in base 10. Having children measure ingredients when baking is a natural way to support measurement skills and noting the shapes of different household items encourages geometrical understanding. In fact, just encouraging parents to use number words when talking with their children is beneficial (Elliott, Braham, & Libertus, 2017). All of these reading and mathematics activities can occur in the course of a regular day; the key is making sure the activities are fun and engaging.

In short, many parents would like advice on what to do to foster their children's early academic skills. School psychologists can provide such advice.

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