One Step at a Time: The Effects of an Early Literacy Text Messaging Program for Parents of Preschoolers

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OVERVIEW

Most existing parenting programs place significant demands on parents' time and inundate parents with information that is hard to absorb. READY4K! (now known as Tips·by·Text) is an innovative eight-month-long text-messaging intervention designed to help parents of preschoolers support their children's development. The program breaks down the complexity of parenting into small, achievable steps and provides continuous support and reinforcement for an entire school year. This study evaluates the effects of the program on children's literacy.

BACKGROUND

Many parents face barriers to providing stimulating care and creating positive home learning environments. Because the quality of early childhood care impacts every aspect of child development and has long-term academic, socialemotional, and economic consequences, identifying parenting programs that work to help children thrive is of paramount importance.

Programs that try to change complex parenting behaviors quickly, through a short series of timeintensive information sessions, have proven largely ineffective. The parenting programs that

KEY FINDINGS

- Parents in the treatment group used the tips and found the program to be helpful.
- Treatment group parents reported engaging in more home literacy activities with their children than control group parents.
- Teachers reported that parents in the treatment group more frequently asked questions about their children's school experiences than control group parents.
- Increased parental involvement at home and school translated into learning gains for children, particularly in the second year of the study, as demonstrated on an early spring learning assessment.
- Children who initially scored below the median on baseline skills benefited from the texting intervention more than their higher scoring peers, indicating that the program may have reduced achievement gaps.

have shown promise, including pediatric clinic-based programs and family visitation programs, are not easily replicable, as they are often expensive or demanding of parents' time and effort.

Beyond facing issues of cost and access, many parents face informational and behavioral barriers to creating the positive home learning environments that they want for their children. They may lack knowledge about the importance of productive parenting practices, or have difficulty sustaining attention over time and making choices that lead to long-term gains. Parenting is a cognitively demanding activity and parents may feel overwhelmed by the sheer number of choices they encounter when deciding how to engage with their children. Instead of making an informed choice, they may end up not engaging at all or defaulting to familiar but suboptimal activities.

THE PROGRAM

New knowledge regarding how to achieve adult behavior change and the dramatic expansion of cell phone use — particularly among families who have not traditionally had access to or utilized parenting supports — have spurred novel approaches to helping parents reach the goals that they have for their children. Today, more than 96% of American adults under fifty have cell phones. Almost all can access text messages and choose to do so, thus introducing the opportunity to use this low-cost and scalable technology to leverage behavior change.

The READY4K! text messaging program delineates small, easy-to-achieve steps towards larger parenting goals. The program provides parents with ongoing encouragement and useful

SAMPLE WEEK OF TEXTS

FACT: Bath time is great for teaching your child important skills for K. Start by asking: What are the things we need for bath time? Why?

TIP: When you're bathing your child, point out the letters on shampoo bottles. Ask your child to name them & the sounds they make.

GROWTH: Keep using bath time to prepare your child 4K! Ask: What rhymes with tub (cub, rub), soap (rope, hope), & bubble (double, trouble)?

information, promoting sustained adherence over prolonged periods of time. The text messages include fun facts and easy tips that can be readily integrated into existing family routines.

Each week during the school year, the program sends parents three texts about a particular set of kindergarten readiness skills. On Mondays, parents receive a FACT text, designed to inform and motivate them by highlighting the importance of the week's skill. On Wednesdays, they receive a TIP text, intended to reduce the cognitive, emotional, and time demands of supporting child development by describing highly specific activities parents can do with their children to build the week's skill. On Fridays, parents receive a "GROWTH" text, providing them with encouragement and a follow-up tip. The text messages address state standards, draw on research on child development and parenting practices, harness behavior change strategies, and cover a wide range of skills. The program is structured as a spiral curriculum, reintroducing topics throughout the year for reinforcement.

THE STUDY

During the 2013-2014 and 2015-2016 school years, we conducted randomized controlled trials of the texting program in the San Francisco Unified School District (SFUSD) with two cohorts of prekindergarten families. We recruited parents through preschools operated by the Early Education Department, which serves the lowest-income third of San Francisco's preschool market. In total, 1,031 parents and guardians agreed to participate in the study, and we randomly selected half to receive the program. Program participants were racially and linguistically diverse, with parents choosing to receive texts in English, Spanish, and Chinese.

In the first year, treatment group parents received a program dedicated to improving early literacy skills and increasing parental involvement at school. In the second, treatment group families also received texts supporting math and social-emotional development.

The study used multiple sources of data to evaluate program effects. Information came from the enrollment forms, end-of-year surveys of parents and teachers, SFUSD administrative records, and students' spring scores on the district's early literacy assessment. The data, along with the program's low dropout rate, showed strong evidence that parents in the treatment group used the READY4K! tips and found the program to be helpful.

CONCLUSION

The READY4K! text-messaging intervention targets the behavioral barriers to engaged parenting and supports the development of early literacy skills in young children. Results of a two-year study show that the program positively affected the extent to which parents engaged in home literacy activities with their children, increased parental activity at home and at school, and translated into student learning gains, particularly for initially lower-performing children. Given the widespread use, low cost, and ease of scalability of text messaging, texting programs show potential as an attractive approach to supporting parenting practices.