

# Sparking Connections:

## Evaluations of Mobile Messaging on Responsive Caregiving

### Executive Summary

**Responsive caregiving** is a key parenting approach that can support positive long-term outcomes for young children, including their language and academic skills, social-emotional competence, and self-regulation and executive function. Responsive caregiving refers to parenting\* behaviors such as engaging in serve and return interactions and providing rich and varied language inputs.

Mobile messaging programs are a low-cost, scalable approach to building parents' knowledge and capacity to support their children's development. These programs directly deliver simple and straightforward information, tips, and activities that parents can incorporate into daily routines. Yet recent investments in these programs have created a need to better understand how mobile messaging affects parents' engagement in responsive caregiving and other positive parenting behaviors, particularly with infants and toddlers. To meet this need, SRI Education partnered with Bright by Text (BBT) and Univision to evaluate the impacts of two parent-focused mobile messaging programs on responsive caregiving.

### About the Studies

The SRI team conducted an experimental study of BBT and a quasi-experimental study of Consejos de Univision (Consejos), a program developed with Too Small to Fail. We examined overall effects on responsive



caregiving and on parents' attitudes, knowledge, and confidence as well as effects among subgroups of parents. We also conducted surveys and interviews with treatment group participants from both studies to understand parents' experiences with the messaging content.

### How Were the Studies Conducted?

**The BBT study was a randomized controlled trial.**

The study team randomly assigned parents to one of two groups. The treatment group received BBT messages, and the control group received placebo messages.

**The Consejos study had a quasi-experimental design.**

The study team recruited a treatment group, who received Consejos messages, from new program sign-ups and a matched comparison group, who received no messages, through social media advertising. We used propensity weights to match the treatment and comparison groups.

\*"Caregivers" includes persons other than biological parents who are responsible for the care of young children. The mobile messaging programs are targeted to this range of caregivers, and caregivers other than parents are included in both study samples. For brevity, we use "parents" to refer to both parents and caregivers in this report.

## Who Participated in the Studies?

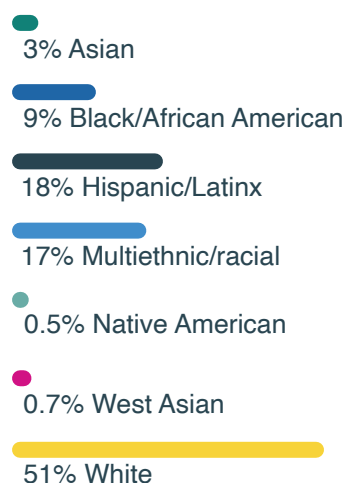
The **Bright By Text** study included a national sample of **409 parents**.

### Parents

- Most were located in Texas, Kansas, and Colorado.
- **42%** reported an annual household income lower than \$50,000.
- **84%** had an associate's degree or higher.

### Children

- All were 18 to 36 months old.
- **30%** attended center-based childcare.
- Race/ethnicity was reported as:



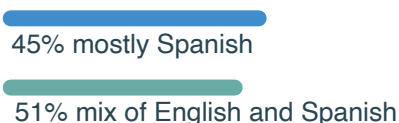
The **Consejos de Univision** study included a national sample of **372 parents**.

### Parents

- Most were located in Texas, California, and Illinois.
- **68%** reported an annual household income lower than \$50,000.
- **52%** had a high school diploma or less.

### Children

- All were 18 to 36 months old.
- **22%** attended center-based childcare.
- Ethnicity was reported as **93%** Hispanic/Latinx
- Language spoken at home was:



Both studies were 12-week interventions. We implemented rigorous designs to enable us to make causal claims about the effects of each messaging program.

## How Did We Measure Parenting Outcomes?

To understand the impact of each mobile messaging program on parenting outcomes, the study team administered parent surveys.

We surveyed parents about their use of responsive caregiving and their parenting attitudes, knowledge, and confidence at baseline and after the 12-week study period.

We administered questions about serve and return interactions only at the end of the study to avoid prompting the behaviors targeted by the programs. We also asked parents about their demographic backgrounds on the baseline survey. We designed surveys to be brief, user-friendly, authentically translated, and readable at a sixth-grade or lower level.

We examined the following outcomes:

- ☑ Serve and return interactions
- ☑ Engagement in literacy activities (days and minutes read, shared reading, and labeling)
- ☑ Attitude toward parenting
- ☑ Parent self-efficacy and confidence
- ☑ Parenting knowledge.

We also administered implementation surveys to treatment group parents twice during the study. We conducted interviews with five parents from each treatment group (BBT and Consejos) after they completed the survey at the end of the study.

## What Were the Impacts of the Mobile Messaging Programs?

The study team did not find evidence that participating in the **BBT messaging program** impacted parents' responsive caregiving or their attitudes, knowledge, and confidence.

However, we found evidence suggesting that BBT differentially impacted parenting outcomes by household income, education, and child gender.

Participating in the **Consejos messaging program** was positively associated with parents' engagement in literacy activities with their children.

Parents in the Consejos treatment group reported reading with their children for more minutes in a typical day than parents in the comparison group did. They also reported engaging in more shared reading activities. We also found associations between participating in Consejos and parent outcomes among parents with lower household incomes and younger children. These findings should be interpreted with caution, however, because there may be bias due to unobserved differences between the treatment and comparison groups.

## What Did Parents Say About the Mobile Messaging Programs?

Parents in both studies reported they enjoyed the messages and appreciated that they could access the messages easily on their own time.

Parents in the BBT program referred to messages as reminders and noted the content was "short, sweet, and to the point." They felt they benefited from the messages, which provided tools to engage with their children and reminded them to "do little things" and bond with their children.

"The biggest struggle is that I work all day, so I don't always have time to plan activities for [my child]. I use BBT when I'm getting ready to leave for work or I just came home. If there's a text that has come in that's interested me, like 'Oh there's one about nature' and we have time to go outside today ... [I click] on it and get some ideas for activities that I can use to engage her that are age appropriate."

Parents who participated in the Consejos program said the messages sparked ideas and prompted them to think of how they could adapt the content to their own lives and children. One parent reported the messages gave them ideas and motivated them to think of others. Others reported that receiving the messages led to more frequent interactions with their children and made them feel more prepared and confident to effectively parent.

“Aprendí a tener más tiempo con la niña, como un poquito de más actividades, porque a veces no tenía muchas ideas para compartir con la niña. Y si te da ideas porque aunque no las hagas al 100% como dice el texto, te motiva y te da ideas hacer cosas con ellos a tus posibilidades.”

*“I learned to have more time with my daughter, like more activities, because sometimes I don’t have many ideas to share with her. The ideas you get, even if you don’t do them 100% like the text says, they motivate you and give you ideas of things to do within your means.”*

## Why Are These Findings Important?

Mobile messaging can be an effective strategy for **sparkling connections** between parents and their children.

Parents in both programs reported that they valued and benefited from the messages. Consejos messages facilitated parents’ engagement in language-rich activities by providing guidance on conversations parents could have with children and suggestions they could easily translate to literacy interactions. For BBT, we found some evidence suggesting a differential impact of the messages for some groups of parents. Although we did not find that participating in BBT was associated with the parent outcomes examined in our study, it may be that parents did not always click through to the linked web pages with details about the information or activities in the messages, or that the COVID-19 pandemic limited their capacity



to engage more with their children. It is also possible that we did not measure the outcomes that BBT does impact.

This evidence is notable given the light touch of the messaging programs (2 to 3 messages a week) and the short 12-week study period. Parenting behaviors are difficult to change. Yet the parents we interviewed mentioned that the easy access to and use of activities with their children made the messages successful.

Together, these results suggest that providing parents with direct guidance and conversational prompts they can apply to a range of activities may be an effective strategy to promote responsive caregiving. As the ecosystem of informal learning environments continues to evolve, researchers, funders, and messaging program developers might further explore not only whether messaging is an effective strategy, but also how and what kind of messages are most impactful, and for whom. Such research would benefit from centering the voices of parents in conversations about the information and resources they want to receive and the best methods to deliver them.