High-quality early childhood opportunities can improve a child’s short- and long-term outcomes, but enrolling in early childhood education (ECE) programs often involves a complex, multi-step process. In New Orleans, families apply for publicly funded ECE seats through the city’s unified enrollment system, OneApp. After submitting their application online, most ECE applicants must provide supporting documentation, in person, to verify their eligibility for these programs. These requirements can be challenging, particularly for disadvantaged families navigating the process with limited time and resources, and may ultimately prevent families from enrolling their children in beneficial ECE programs. In 2016, roughly one third of New Orleans parents who applied for a public ECE program through the OneApp never completed the verification step.

For this study, we partnered with the district office overseeing the OneApp to identify and address challenges families may face during the ECE verification process. The district usually communicates with families throughout the process via formal, weekly email reminders to verify eligibility, text alerts for weekend verification events, and one robo-call reminder to verify.

Our study examines whether changing communications with families via weekly text messages could help parents navigate the process and increase both verification and enrollment rates. We used two types of texts: some parents received texts with information about the verification process, and others received personalized messages with similar information that also included invitations for parents to reply with any questions about the process. We then compared these two groups’ verification and enrollment rates to those of parents who received the district’s usual reminders. Our key findings are as follows:

- Overall, text-message reminders increased verification rates by up to 7.7 percentage points, from 59.5% to 67.2%.
• The text message reminders were particularly effective for parents who applied solely to public pre-K programs. For this group, verification rates increased by up to 14.5 percentage points, from 67.9% to 82.4%. Effects for Head Start applicants were smaller and not statistically significant.

• Personalized text-message reminders also increased enrollment for pre-K applicants by 10.1 percentage points, from 62% to 72.1%, while non-personalized reminders had no significant effect.

• Almost 90% of families receiving personalized text messages engaged with district staff, providing a real-time glimpse of the specific challenges preventing many parents from completing verification. Half of these parents asked questions related to understanding the process, and one in five mentioned a logistical barrier limiting their ability to complete verification.

This is the first study, to our knowledge, to examine how text-message support affects ECE verification and enrollment rates in a centralized enrollment system. Our study provides initial evidence that supporting families through the application process with a low-cost text-message system has potentially high payoffs, improving verification and enrollment rates and enabling parents to access high-quality early childhood education for their children.

BACKGROUND

High-quality early childhood opportunities can improve a child’s short- and long-term outcomes. Although public investment in ECE has risen rapidly and most young children now experience regular non-parental care, the process of finding and enrolling in ECE programs remains difficult for many families across the country.

Applicants to publicly funded program typically confront a multi-step process—search, apply, verify eligibility, and enroll—that demands sustained attention in navigating an assortment of complex processes and requirements. First, parents must search for programs that meet their needs. Second, they must submit an application to express interest in the programs. Third, if programs have particular eligibility requirements, parents must verify their eligibility by providing, for example, documents that demonstrate their household income and residency. Finally, conditional on completing these steps, parents must enroll to confirm that their children will take a seat that has been offered.

These complex processes can result in poor outcomes, such as enrolling in undesired early childhood programs or not enrolling at all. These obstacles may be particularly burdensome—and consequential—for disadvantaged families tasked with navigating the ECE choice process with especially limited resources.

The verification step, in particular, can be burdensome, especially for families in poverty. First, parents may not be aware of the verification requirement. Second, they may be aware of the requirement but fail to follow through due to difficulty understanding the verification process. Finally, some parents may know that they have to verify, understand how to do it, want to do it, but still fail to complete verification.

How Most Parents Apply for Publicly Funded Early Childhood Education Programs

<table>
<thead>
<tr>
<th>Step 1: Search.</th>
<th>Parents must search for programs that meet their needs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Apply.</td>
<td>They must submit an application to express interest in the programs.</td>
</tr>
<tr>
<td>Step 3: Verify Eligibility.</td>
<td>If programs have eligibility requirements, they must verify their eligibility in person.</td>
</tr>
<tr>
<td>Step 4: Enroll.</td>
<td>Parents must enroll to confirm that their child will take a seat that has been offered.</td>
</tr>
</tbody>
</table>
it, and yet, due to one constraint or another (e.g., transportation issues or work schedule conflicts), lack the capacity to complete the process. Understanding which challenges pose the largest barriers for parents verifying their ECE eligibility is essential, as they imply different policy solutions.

POLICY CONTEXT

New Orleans provides a useful context for this study because the city has recently expanded its unified enrollment system, OneApp, to include ECE programs. Parents applying for seats for infants, toddlers, and preschoolers can now request enrollment at publicly funded school-based pre-K and Head Start programs, which are federally funded and serve low-income children from birth to age five. This enrollment centralized system, created in response to Louisiana’s Early Childhood Education Act (Act 3), allows parents to consider many ECE options and indicate their interest centrally, rather than having to visit each program individually and complete separate applications for each one.

Through OneApp, parents can request seats in up to eight publicly funded ECE programs by submitting a ranked list of programs, which an algorithm uses to make placements. However, unlike the K-12 context, where children are eligible to attend public schools irrespective of income, early childhood programs are often targeted to low-income children. As a result, most ECE applicants must take the additional step of providing documents, in person, to verify their eligibility for a publicly funded seat. Applicants for almost all ECE seats must show the child’s birth certificate and proof of Orleans Parish residency. Further, because all Head Start and almost all state pre-K programs are targeted to low-income families, the vast majority of applicants must also show proof of their household income. School-based pre-K applicants can complete their verification during standard weekday hours at one of the district’s three Family Resource Centers (FRC), located throughout the city. However, because of an application requirement, Head Start applicants cannot complete the process at an FRC and must go to one of roughly twenty Head Start Eligibility Centers, which do not have standard hours or days of operation, making the process potentially more difficult to navigate for those applicants. The district also holds five Saturday verification events during the application period, at different locations around the city, at which parents applying to both school-based pre-K and Head Start can complete all aspects of the verification process.

While having a unified enrollment system with a single application may have simplified some aspects of finding ECE programs, the in-person verification process, for many families, remains complex. Because applicants cannot be matched to an ECE program until they have verified their eligibility, unverified families do not receive placements into a publicly funded ECE program. However, the burden of verification is not unique to a centralized system; centralized enrollment simply enables us to easily identify the number of interested parents for whom verification, specifically, appears to pose a barrier.

... the in-person verification process, for many families, remains complex.

This study examines the effects of text-messaging support designed to assist low-income parents navigating the ECE enrollment process in New Orleans in 2017-18 (applying for 2018-19 seats). Specifically, we address three main questions:

1. What effect did text message support have on ECE verification rates?
2. What effect did text message support have on ECE enrollment rates?
3. What challenges did families face during the ECE application and verification process?

HOW DID WE TEST THE EFFECTS OF TEXT-MESSAGE SUPPORT?

Through our collaboration with the Recovery School District, which oversaw the OneApp until summer 2018, and with the Orleans Parish School Board, which now oversees the OneApp, we obtained de-identified data about all 2018-19 ECE OneApp applicants. We
also obtained data on whether parents ultimately completed the verification process, along with de-identified transcripts of text message conversations between parents and district staff.

A total of 4,111 parents submitted applications for 4,740 children in the 2018-19 Early Childhood OneApp. The text-message support study included the subset of parents (1,224 parents who submitted applications on behalf of 1,407 children) who applied for a seat within the first four weeks of the application period and had not completed the verification step by the end of that period. These unverified applicants were randomly assigned to three communication groups. Random assignment ensures that there are no differences between the groups, thus enabling us to know that any differences in group outcomes are caused by the text-message support. Parents with more than one child in the application system received the same type of communications for each child. Demographic data on participants are limited, but 90% of families in the sample specified that they were eligible for free or reduced-price lunch, indicating that the vast majority of our participants are likely living at or under 185% of the poverty line.

The district usually communicates with families throughout the process via formal, weekly email reminders to verify eligibility, up to five text alerts for weekend verification events, and one robocall reminder to verify. To understand the effects of additional text messages, some parents were included in a baseline comparison group who received these typical communications. A second group of parents received the same communications plus weekly non-personalized text messages, also formal in tone. We call this the “formal reminder group.” A final group of parents received personalized reminders that were more casual in tone and encouraged two-way communication with a named member of the district’s staff. We call this the “personalized reminder group.”

To identify the effects of the text-message support, we compare verification and enrollment rates for each group to the baseline comparison group. Specifically, we look at student-level outcomes, including whether the child was verified by the deadline, whether the child was enrolled in a public ECE program one year later, and whether parents responded to text messages. Additionally, because the verification process is more complicated for Head Start applicants, we examine the specific benefit of the support for Head Start applicants.

### WHAT REMINDERS DID DIFFERENT GROUPS RECEIVE?

<table>
<thead>
<tr>
<th>Group</th>
<th>Communications</th>
<th>Sample Reminder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline Comparison Group</strong></td>
<td>Weekly email reminders to verify eligibility, up to five text alerts for weekend verification events, and one robocall reminder to verify. (414 parents / 472 children)</td>
<td>Your child’s OneApp is incomplete until you verify eligibility. Please review the following link for help finishing your OneApp: <a href="https://samplelink.org">https://samplelink.org</a></td>
</tr>
<tr>
<td><strong>Formal Reminder Group</strong></td>
<td>Same communications as the baseline group plus up to 15 weekly non-personalized text messages. (400 parents / 463 children)</td>
<td><strong>Sample Formal Reminder</strong>&lt;br&gt;Hi [Parent First Name]! I’m Ashley from EnrollNOLA*. You’re almost done with [Child First Name]’s OneApp! You just need to verify eligibility. Want help with next steps? :)</td>
</tr>
<tr>
<td><strong>Personalized Reminder Group</strong></td>
<td>Same communications as the baseline group plus up to 19 personalized reminders that were more casual in tone and encouraged two-way communication with a named member of the district’s staff. (410 parents / 472 children)</td>
<td><strong>Sample Personalized Reminder</strong>&lt;br&gt;Hi [Parent First Name]! I’m Ashley from EnrollNOLA*. You’re almost done with [Child First Name]’s OneApp! You just need to verify eligibility. Want help with next steps? :)</td>
</tr>
</tbody>
</table>

* EnrollNOLA is the public-facing name of the district’s student enrollment office.

We also conduct a content analysis of text message conversations between district staff and applicants to identify barriers to verification. In addition to examining effects on verification and enrollment rates, the two-way nature of the communication allows us—and the district—to obtain a real-time glimpse of families’ enrollment processes and what types of challenges they experience.

### WHAT EFFECT DID TEXT MESSAGE SUPPORT HAVE ON ECE VERIFICATION RATES?

Our results indicate that low-cost text message support can help parents overcome the eligibility verification barrier in the ECE enrollment process. Figure 1 shows that parents who received either
type of text message reminders, regardless of tone, were more than 7 percentage points more likely to complete verification than parents in the baseline group.

**Figure 1. Text message support increased ECE verification rates.**

Effects were particularly large for parents who applied solely to public pre-K programs (Figure 2). For these applicants, text message reminders increased verification rates by 12.6 to 14.5 percentage points. We did not find significantly different verification rates between the personalized and formal reminder groups. The verification process is more complicated and potentially confusing for Head Start applicants, which may explain why text-message support was not enough to increase verification for this group.

**Figure 2. Text message support was more effective for pre-K applicants than Head Start applicants.**

**WHAT EFFECT DID TEXT MESSAGE SUPPORT HAVE ON ECE ENROLLMENT RATES?**

Formal text message reminders had no effect on the enrollment rate, but personalized texts had a substantial effect on later enrollment for pre-K, but not Head Start, applicants (Figure 3).

**Figure 3. Personalized text message support had a large effect on pre-K enrollment.**

Pre-K applicants in the personalized reminder group were 10.1 percentage points more likely to be enrolled in a New Orleans public ECE program in February of the following school year, relative to the baseline group. However, Head Start applicants in the personalized reminder group were only three percentage points more likely to be enrolled, and this difference was not statistically significant. Additionally, the formal reminders did not have a significant effect on enrollment for either group. It appears that engaging in a personal interaction with district staff may have a longer-term effect on parents’ engagement with the system.

**WHAT CHALLENGES DID FAMILIES FACE DURING THE ECE APPLICATION AND VERIFICATION PROCESS?**

Parents who received personalized text messages responded to those messages at a much higher rate (89%) than parents who received formal reminders (11%). The increased text response rate enabled administrators to respond to parents’ questions during the verification process, and provided insights about the key challenges families face in verification.
We examined text message response content from the personalized reminder group across three broad themes relating to a parent’s likelihood of verifying—awareness, understanding, and capacity. All percentages reported in this section are calculated using the total number of parents in the personalized reminder group.

Is there a lack of awareness of the verification process?

Text conversations indicated that parents were generally aware of the verification process. Fewer than 2% of parents indicated a lack of awareness that they needed to verify their child’s application. Of course, the text messages themselves might have made parents aware of the need to verify, so we cannot identify with certainty how many parents were unaware of the verification requirement in the absence of the texts.

The vast majority (81%) of parents asked for help with the process, indicating some awareness of the process—and continued engagement—but also a desire for help or guidance.

Do parents have difficulty understanding how to verify their child?

The most frequently mentioned barrier to verification was a lack of understanding of the steps required to verify. Just over half (51%) of parents asked specific questions like, “Can I bring the documents to any one of the Head starts even though I didn’t select them [as] a school?” District staff received questions about verification locations (18% of parents), the documentation required to complete the process (17%), dates or times for verification (12%), and related deadlines (10%).

Approximately 9% of parents thought they had completed the process but realized through conversations with the district team that they had missed steps. In many of these instances, there had been a misunderstanding about the specific verification requirements for Head Start seats, an issue we revisit in more detail below.

Do parents indicate a limited capacity to complete the verification process?

Twenty percent of parents indicated some logistical barrier to completing the process. About 15% expressed difficulty finding or accessing at least one of the required documents, and 9% expressed that schedule conflicts prevented them from verifying during the available hours.

In one instance, a parent appeared overwhelmed by the process, communicating to the district team, “I see a lot of stuff is required and it's too much personal information for me to come up with.”

In most instances, however, parents stated specific concerns such as: “I almost have all the paper work ready to go submit [but couldn’t] get into my food stamp account,” to which the district team could provide alternative solutions for the parent.

Do parents’ text message responses offer insight into lower verification rates for Head Start seats?

Families applying for Head Start seats verified at lower rates and exhibited more confusion with the verification process. Looking more closely at text conversations between these applicants and district staff highlights areas of misunderstanding that may be contributing to these lower rates.

Some parents did not understand the requirement to verify for a Head Start program every year. Parents whose child had been enrolled in a Head Start seat in previous years may have recently gone through the verification process, particularly if they enrolled after the start of the school year. These parents were aware that the verification step was required, but may not have realized they had to complete it again for the new program year.

Head Start parents also exhibited confusion about verification locations. Many applicants did not understand that their verification was incomplete without an interview at a Head Start center, causing
confusion for parents who had verified at an FRC and thought the process was complete. Parents who apply for a Head Start seat can verify their child at a Head Start center for both Head Start and school-based pre-K seats. However, an FRC cannot verify a child for their Head Start seat, because of the Head-Start-specific interview requirement.

Overall, our text analysis suggests that communications from district staff were beneficial to parents. Fewer than 2% of parents who received at least one text chose to opt out of the text messaging service, and parents voiced their appreciation in many of the text conversations. “I did it [verified] thanks so much for [t]he reminders,” wrote one applicant, while others told a district staff member that they would look for her at verification events. The text conversations also provided the district with insight into the struggles that parents face throughout this process—insight that the district can use to inform and refine verification processes in future OneApp enrollment cycles.

**DISCUSSION**

There is little debate over the value of high-quality ECE, which contributes to children’s cognitive and emotional development. ECE programs also have the potential to improve achievement and life outcomes for disadvantaged children. Over the last two decades, multiple federal and state initiatives have worked to increase low-income children’s access to high-quality early childhood education. However, families still face administrative and logistical barriers in the ECE application and enrollment processes.

Focusing on the verification step of New Orleans’ centralized ECE OneApp enrollment process, we find that a simple text-message support can substantially improve the rate at which low-income parents complete this step. In considering whether or not this kind of support may help parents in other contexts, it is important to determine how much the additional text messages cost per verified and enrolled applicant. Overall, text message reminders cost $40 per additional verified applicant. The reminders were especially effective for school-based pre-K applicants, at the cost of $25 per verified student and $31 per enrolled student. This study offers the first evidence we are aware of that highlights the potential role of inexpensive text message reminders in supporting parents through the ECE enrollment process.

Other approaches to helping parents through eligibility verification might have larger, or different, effects. We tested a particular type of support (text messages), in a particular context (the New Orleans ECE enrollment system), with a particular population (low-income parents). The study’s results might not generalize to settings different from this one. Notably, too, we tested just one type of approach—helping parents through a barrier in the ECE verification process.

One alternate approach would be to remove the barrier altogether. For example, policymakers could align ECE income eligibility requirements with requirements for other social services, and then pre-approve ECE applicants who qualify for these services. New Orleans is currently working to pre-approve applicants who qualify based on Medicaid receipt, though these applicants will still be required to bring in proof of age and residency and to complete the federally required Head Start interview.

Policymakers could also attempt to create additional ways through a barrier, such as allowing parents to submit paperwork online or, as a neighboring Louisiana parish does, send photographs of their documents. Simplifying the verification process for Head Start applicants could be particularly beneficial, as many of today’s most disadvantaged parents—who might benefit most from high-quality care—confront the most complex and burdensome enrollment processes.

Nevertheless, this study’s findings have broad implications for early childhood enrollment. This research shows that many parents do, in fact, want to complete the enrollment process but are getting lost along the way. The text-message reminders we tested demonstrate that low-cost support can help families through the process and, importantly, increase the rate of pre-K enrollment.
How is this Research Related to Other ERA-New Orleans Studies?

This research continues our study of early childhood education and of centralized enrollment systems, looking specifically at how text message reminders can support families through the pre-K application and enrollment processes.

In *How Have New Orleans’ Charter-Based School Reforms Affected Pre-Kindergarten?*, Lindsay Weixler, Jane Arnold Lincove, and Alica Gerry examine how the growth of charter schools in New Orleans affected pre-K program offerings as the school system transitioned from a centralized school system to an almost-all-charter district. The study shows how charter-based reforms influence how and why pre-K and other optional educational programs are offered in almost-all-charter systems.

In *The New Orleans OneApp: How (and How Well) Does Centralized Enrollment Work?*, Douglas N. Harris, Jon Valant, and Betheny Gross examine New Orleans’ centralized enrollment system, looking closely at how the OneApp is designed and how schools assignments happen in a majority charter setting.

In ongoing analyses, we are examining whether text messages can be effective for supporting Head Start applicants under different circumstances, and how else to support parents through the application, verification, and enrollment processes.
The mission of the Education Research Alliance for New Orleans (ERA-New Orleans) is to produce rigorous, objective, and useful research to understand the post-Katrina school reforms and their long-term effects on all students. Based at Tulane University, ERA-New Orleans is a partnership between university-based researchers and a broad spectrum of local education groups. Our Advisory Board includes (in alphabetical order): the Louisiana Association of Educators, the Louisiana Association of Public Charter Schools, the Louisiana Federation of Teachers, the Louisiana Recovery School District, New Schools for New Orleans, the Orleans Parish School Board, the Orleans Public Education Network, and the Urban League of Greater New Orleans. For more information, please visit the organization’s website.