The Effect of Personalized Text-Message Support on Completed Applications for and Enrollment in Early Childhood Education

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Context

Although public investment in early childhood education (ECE) has risen rapidly, and most young children now experience regular non-parental care, the process of finding and enrolling in ECE programs remains complex for many families. Applicants to publicly funded programs typically confront a multi-step process—search, apply, verify eligibility, and enroll—that demands sustained attention in meeting several deadlines. Falling short on any step can mean losing a seat.

Behavioral science research in education has shown the potential for personalized reminders (Castleman & Page, 2016; Dechausay & Anzelone, 2016) and supportive interactions (Bettinger et al., 2012; Castleman & Page, 2015) to help people complete complex tasks. With few exceptions, however, studies on supporting parents of young children have focused primarily on engaging parents with their children's learning (i.e., York & Loeb, 2014), providing little guidance on whether light-touch interventions can help parents enroll in public ECE programs.

Objective

The aim of this study was to test whether personalized communication could help parents complete the eligibility-verification step of the ECE application process, and to identify the primary barriers making verification challenging.

Setting

This study was conducted in New Orleans, LA, where a centralized ECE enrollment process facilitates easy identification of and communication with parents applying for any publicly funded ECE seat (including Head Start and school-based pre-K). To apply, families first log into a portal and fill out a single application (OneApp) with rank-ordered choices. After applying, parents then provide documents—in person—to demonstrate eligibility for their preferred programs. This step must be completed within a week of the end of the application period (during the year of this study, the application was open November 1st through February 23rd). Though the centralized application should simplify the process for parents, the in-person verification step remains a practical barrier, particularly for low-income families. About 35% of 2016-17 applicants did not complete this verification step, forfeiting their opportunity to receive a seat.

Participants

Participants were applicants to the 2018-19 ECE OneApp who did not complete verification within one week of application submission (N=3,348 parents; 3,908 children). We do not yet have demographic data on participants, but 86% of parents applied for a seat limited to children eligible for free or reduced-price lunch, indicating that the vast majority of our participants are likely living under 185% of the poverty line.

Intervention

We partnered with EnrollNOLA, the agency overseeing the application process, to test the effects of communication methods on parents' verification rates. Beginning four weeks after the application opened (November 27th), applicants who had not yet verified were randomly assigned to a group. For the rest of the application period, new applicants who had not yet verified were identified and assigned to a group every Monday until the application closed. Group 1 (n=1,127 parents/1,312 children), the control group, received EnrollNOLA's typical communications: formal, weekly email reminders to verify their eligibility, text alerts for five weekend verification events, and one "robo-call" reminder. Group 2 (n=1,093/1,284) received the same communications plus weekly text messages, also formal in tone. Group 3 (n=1,128/1,310) received the same communications as Group 2, but with a different tone and style. Their messages were personalized, casual in tone, and encouraged two-way communication with EnrollNOLA staff (e.g., "Hi, it's Ashley… I want to make sure [Child] doesn't lose her spot for next year! Text me if you'd like help finishing the OneApp!"). If parents replied to a text, an EnrollNOLA staff member replied and worked to answer parents' questions and solve problems related to completing verification. Parents continued to receive weekly texts through the application period until they completed verification.

Data Collection and Analysis

Data were collected by EnrollNOLA through their text-messaging and program-management systems. Every week, EnrollNOLA sent a de-identified applicant roster to the research team, who randomly assigned new applicants to groups. At the end of the application period, EnrollNOLA sent the research team a de-identified list of applicants with their group membership, verification status, and program type applied for (Head Start or Pre-K). Additionally, EnrollNOLA sent a complete transcript of all text message conversations, linked to the unique parent identifier.

Logistic regression, with dummies for group membership, was used to assess the impact of the intervention on the likelihood of completing verification. The analysis was at the child level, but because 14% of parents (the unit of randomization) applied for multiple children, standard errors were clustered by parent. Text message content was analyzed using an inductive coding process. Frequencies were then tabulated for each identified theme.

Findings

Applicants assigned to receive personalized texts were six percentage points more likely to verify their eligibility (60.4% verified as compared to 54.6%; p<.01). Applicants receiving formal texts (57.6% verified) were statistically indistinguishable from both the control group and the personalized group. Subsequent analyses will examine the effects of the intervention on enrollment in a public ECE program in 2018-19.

Seventy-five percent of parents in the personalized group responded to at least one text, and of those who responded, the overwhelming majority (83%) asked for assistance. Only 11% of respondents indicated that they did not need help. Over half of applicants requested help with understanding the requirements (documents needed, location and time of appointments, etc.), and approximately one-fifth indicated that a practical barrier like work hours, transportation, or document access limited their capacity to complete the process.

Conclusion

Just as the complexity of the FAFSA poses a significant barrier to college-entry for low-income students (Bettinger et al., 2012), the complexity of enrollment and income-verification processes for ECE creates a substantial burden for low-income parents. Our findings show that a simple, low-cost intervention can improve parents' success in applying for public ECE programs. The most frequent barriers identified in parent texts were related to understanding the process, which is a problem that can be solved with a communication intervention. These results also have broader implications for how government agencies communicate with the public. Formal-sounding reminders did not appear to be effective, but personalized communication was.